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Alcohol, Society, and the State

A COMPARATIVE
STUDY OF
ALCOHOL CONTROL



A report of the International Study of Alcohol Control Experiences, in collaboration with the WHO Regional Office for Europe



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A COMPARATIVE STUDY OF ALCOHOL CONTROL

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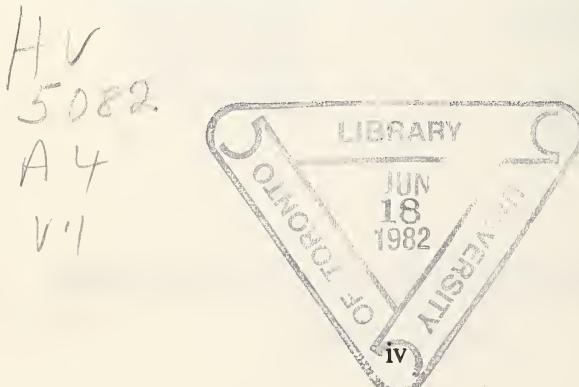
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Preface

Over the last decade, the growing concern felt by Member States regarding alcohol-related problems has been reflected in a number of WHO documents. In 1975, the 28th World Health Assembly drew attention to the association between the level of alcohol consumption and certain forms of health damage (Resolution WHA 28.81). In 1979, the 32nd World Health Assembly recognized problems related to alcohol as ranking among the world's major public health problems and urged Member States to take all appropriate measures to reduce its consumption among all sectors of the population (Resolution WHA 32.40).

The background to this renewed interest in alcohol-related policies is threefold. First, the rapid post-war increase in overall alcohol consumption was accompanied by an increased magnitude of problems related to drinking. Second, it was realized that many alcohol problems cannot be conceptualized as manifestations of an underlying entity, that of alcohol dependence. Alcohol dependence, while widespread and worrying, constitutes only a small part of the total of alcohol-related problems. And third, the limited efficacy and high cost of existing treatment systems gave impetus to the search for strategies of prevention.

The prevention of alcohol-related and drug-related problems has been one of the main objectives of the medium-term programme in mental health for the European Region. In 1975, an international group of researchers reviewed the scientific evidence on the relationships between alcohol control policies, levels of aggregate consumption, and chronic health ailments related to drinking. (Bruun et al., 1975) The report had a considerable impact on international scientific debate, and it was felt that more information on related topics, not directly dealt with in this first project, was needed. In view of the wide variety of alcohol problems, it was deemed important to study the significance of cultural patterns of drinking as well as consequences of single-drinking occasions. It also became evident that, in order to be realistic, alcohol control policies pursuing public health goals require a deeper understanding of the historical processes lying behind the relaxation of controls over the last decades.

In an effort to examine these issues, the International Study of Alcohol Control Experiences was conceived. It originated as a collaborative enterprise between the Addiction Research Foundation of Ontario, the Alcohol Research Group in Berkeley, and the Finnish Foundation for Alcohol Studies. Research groups from Ireland, the Netherlands, Poland,

and Switzerland joined the project, and the international aspect of the project was carried out under an agreement between the WHO Regional Office for Europe and the Finnish Foundation for Alcohol Studies.

In order to understand the social dynamics of the post-war increase in alcohol consumption and to study the control measures in their historical context, the project was carried out as a series of comparative case studies.

The results of the project are drawn together in this report and its companion volume. The first report is an international discussion of the post-war experiences (1950-1975) of the seven societies. The second report summarizes each of the seven case studies.

The societies studied in these two volumes all belong to the industrialized part of the world but the analysis sheds light on genuinely international processes that are likely to have a global influence. The report is also unique in that it analyses the social dynamics and structural constraints of control policies, considerations essential to the design of realistic measures for strengthening the impact of public health concerns but which are often not taken into account. I hope that the conclusions of the study will be of value to public health authorities throughout the world.

Leo A. Kaprio, M.D.
Regional Director for Europe
World Health Organization
Copenhagen, October 1981

Foreword

The key word in the title of this book is "state." So strong an emphasis on state behaviour is rare in books on social problems. It is not individuals who are at the centre of attention here, nor is it alcohol problems or concrete cases of control. The major ideas have to do with their inter-relationships and with their management under the conditions of the modern welfare state — that type of organization which aims to provide its citizens with the opportunity to live their lives as consumers of commodities and services.

The sample consists of seven societies, two of them states within federal unions. Both Eastern and Western Europe are represented, and also the North American continent. The most intensively studied span of time is the period from 1950 to 1975, but happily the authors also range beyond these dates to include relevant data and reflections from the 19th century and for 1981.

Alcohol serves as a sort of trigger for state action in this description. Alcohol problems, as well as alcohol control, are seen as reflecting certain basic features in the welfare state. At the same time, alcohol is seen as directly influencing the development of these features themselves. We understand more about the state when we observe how it reacts to alcohol and we also, in the end, understand more about alcohol.

In the time span most intensely studied by the authors, alcohol was to a large extent seen and handled as a commodity. The years after World War II were years of increased material possession in these countries, for consumption or for display. Alcohol followed the general pattern. Production increased, the producers grew bigger, small ones were squeezed out of the market, sale took place increasingly in general stores, consumption spread to places of general consumption, and everywhere we had a layer of international tastes and habits added to the national ones. Consumption of alcohol became less culturally distinct from country to country, common to more groups of people, and frequent among many more of them.

Of course this pattern led to more drinking.

Given such a situation, one might expect state control over the import, production, and sale of alcohol to increase. This has not happened, and the book explains why.

One might also expect an increased reliance on measures within the institution of law and order to control the unwanted effects of drinking. That has not happened either. On the contrary. With the exception of

the drunk driver, the legal institution seems everywhere to have toned down its activities vis-à-vis visible alcohol problems. Instead, the institution of health and care has increased its activity. Drunks in the streets are taken to sobriety units rather than to police stations, and are treated in hospitals rather than in work camps run by prison authorities. The authors point to several reasons for this, all related to conditions within modern states.

Of focal concern is the question of work. In most of the countries studied, the use of alcohol at the place of work was brought under some sort of control before the welfare state was firmly established. This was partly the result of efforts by state authorities and by ideologically predisposed leaders among the workers. But conditions of the labour market must also have played an important part. With unemployment around, the threat of expulsion from the labour force is a powerful incentive to abstain while on the job.

Those expelled from the work force were, during the first 60 years of our century, regulated by quasi-penal means. Special laws against troublesome drinkers served the same regulatory functions as vagrancy laws had served earlier. But with the welfare state, two things happened. First, the increase in production had not only been in commodities — things — but also in services. The enormous expansion of the health service made it possible for alcohol problems to be handled within the institution of health. Experts were there, eager to serve. In addition came a development which made it necessary to tone down the penal aspects. Penal sanctions against individual unacceptable alcohol users were traditionally directed against persons from the labour class. When labour organizations became, to some extent, a part of the state, the old selective penal ways of coping with alcohol problems, made embarrassingly visible by the association with social misery, could no longer be easily upheld.

I think this interpretation of the current situation is a valid one. But the situation is highly unstable. To me, three alternative developments seem probable.

The first, the one most sharply focused on by alcohol researchers and also the one which this book strongly propounds, is a reliance on attempts to *reduce the availability of alcohol*. The more realistically alcohol is seen in relation to other drugs, the better are the chances of state control over this substance. We are very much aware of the problems involved in controlling both the pharmaceutical industry and the tobacco industry. The difficulties of controlling the alcohol industry are no less formidable. But, in itself, this is not an argument against renewed attempts, particularly since the alternative development seems so grim.

This alternative development is a revival of measures of control directed at *the user*. In the old dilemma over control of the bottle and con-

trol of the man, my belief — corroborated by several observations in this book — is that we will soon experience a strong revival of the importance of the police and of penal measures against those who are seen as abusers of alcohol. Let me describe this development through a sociological discourse on state control of youth behaviour in the welfare state.

Owing to conditions in the labour market the social category "youth" is expanding all the time. Once upon a time, it was possible to talk about "teenagers." Today the very term is obsolete, youth now lasting much longer. The period before entering the labour market, or the "real life," is extended into the late twenties. Some pass directly from being a youth to being a pensioner for the rest of their lives.

In such a situation the state is confronted with dilemmas worse than those presented by drinking workers. Those workers could be subdued into sobriety by the prospect of expulsion. But large categories of young people have not been let in, and some know they never will be. The state is faced with the problem of how to control segments of the population who know they are not needed except as consumers in a society where good economic reasons encourage the perception of alcohol as an ordinary consumption commodity.

Two solutions are then attempted. The first is to re-convert young persons into children when it comes to alcohol. Eighteen to 20-year-old people may cohabit, vote, marry, or be called up for military service, but when it comes to buying brandy, they are defined as children and the vendor will lose his licence if he gives them access to the forbidden substance. The fight over age limits for purchase and serving is a fascinating attempt to define the problems away. For children, alcohol is defined as a drug, and teetotalism can reign, while business, and drinking, can go on as usual for most others. The same mechanisms were at work in the regulations applied by some countries to Eskimos, Indians, and in certain cases, blacks. These people were at some stage in history seen as "other beings" to whom access to alcohol had to be denied. They were made an exception of in the same way as those thought to be "alcoholics" were: that is, they were people for whom alcohol was out of the question and therefore forbidden. Instead of placing restrictions on the substance, we get prohibitions imposed on certain categories of supposedly particularly vulnerable individuals. This might work if the criterion for prohibition is colour, and the colour-carrier is without power and severely isolated. But age is a continuous variable; it is easy to make a disguised trip into adulthood. Young people also have some power, at least as purchasers. There are limits to how far up in age childhood can be stretched as a measure of control.

A better solution, seen from the state's point of view, is therefore to sidestep the whole issue of alcohol and concentrate on narcotic drugs.

Drugs are mostly used by youngsters, but prohibited for everyone, so no discrimination is implied when total wars against drugs are launched. With narcotics then, it is possible to do what cannot be done in the field of alcohol control. Here the police can be brought back to power. Here can be rebuilt the special investigative machinery once so energetically used in the fight against illegal alcohol traffic. Here can be re-established the quasi-penal "treatment institutions." Here are people in need of control, without organizational links to the power holders, not needed in the labour market, consuming a substance defined as dangerous, unwanted, and seen as criminal by an overwhelming majority of those in power and their advisors. The drugs are not a commodity for general use. No important interests are hurt, but many are helped, by an energetic policy of total prohibition. In contrast to alcohol control, the vigour in the attempts to curb use of narcotic drugs illustrates what is said in this book about our leaner ways of handling alcohol. It may be, however, that this book is written in the last stage of a liberal period.

With increased unemployment accompanying automation and economic recession, we will experience a renewed interest in the direct control of the working class. The plight of youth will become the plight of the workers. With recessions troubling the industrialized western world there will follow strains on the health and social security systems. If spending is to be cut, the money spent on "moral sicknesses" will be the first to go. The first demands in this direction have already come. Law and order will be back in control. Recent episodes in the drug scene will strengthen this whole development. What has been done there will act as a model: we get rid of narcotic drug users for a period, why not enlarge the territory and include alcohol abusers as well? The obvious similarity in the two types of substances might be less embarrassingly visible when the approach is made through the advanced users. The large build-up of control personnel directed against illegal drugs can easily claim territory in the field of alcohol also. They have the know-how, also of the similarities in the substances. With a crumbling health market, they will be eager — and able — to expand into alcohol control. To include alcohol into the system of drug control might weaken the image of drugs as something peculiar, and therefore undermine their prohibition. But at a time when severe troubles beset the control of the general underemployed working population, this might be seen as a small evil.

* * *

Of course there is a third alternative to this development. There is the possibility of partitioning the large national state to create more of a

gemeinschaft structure, to replace the consumer society with one more conducive to self and mutual support. The independent communes thus formed would be of a size which allows people to cope with their problems without assistance from experts in the application of force. Obviously, this is not the most likely of the possible courses of development. One way of improving its chances is to clarify what would happen if we were simply to continue on our present course.

Nils Christie
Oslo, October 1981

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1. Introduction

INTERNATIONAL STUDY OF ALCOHOL CONTROL EXPERIENCES

The complex effects of alcohol use have brought about various forms of societal responses. One form of response to alcohol problems has been the treatment, correction or various other types of social handling of the individual deviant drinker by what may be termed institutions of social control. Another form of response has been the inculcation in the population of norms of self-control in one's drinking behaviour as exemplified by education programmes and health promotion campaigns. A third form of response has been the erection of specific state structures, usually known as alcohol control systems, to manage the production and distribution of alcohol. All three responses are thus in some sense strategies of control. The particular mixture of forms of control varies greatly in different cultural, social, and political contexts.

It is within this frame of reference that the International Study of Alcohol Control Experiences (ISACE) analysed the social history of the post-war alcohol experience in seven societies. Our study is mainly concerned with alcoholic beverage controls — with the state's role in managing the production and distribution of alcohol. The goals of the project were (1.) to trace the historical development of alcohol control policy, its determinants, and its effect on the levels and patterns of alcohol consumption in the seven societies, and (2.) to assess the potential influence of control policy on the consumption of alcohol and its adverse consequences.

Not all alcoholic beverage control is intended to deal with alcohol problems. Governments may, for example, intervene in the market to secure a reasonable income for farmers growing raw materials for the alcohol industry. Sometimes quality control is the rationale for regulation. In many instances, a particular regulatory measure may be the complex result of contradictory influences. In this study, the term "alcohol control" refers to any government measure that relates to the purchase, production, or trade of alcoholic beverages, whatever the aim of such measures may be. Thus, the government measures which constitute the alcohol control system are defined independently of their motives.

2 Introduction

BACKGROUND OF THE STUDY

In 1975, a small international group of alcohol researchers reviewed selected aspects of the consequences of alcohol use and concluded that "changes in the overall consumption of alcoholic beverages have a bearing on the health of the people in any society. Alcohol control measures can be used to limit consumption: thus, control of alcohol availability becomes a public health issue" (Bruun et al., 1975: 90).

The 1975 project on alcohol control policies deliberately concentrated on a limited number of strategic issues. In the report, control measures were mainly discussed in terms of their effects. The report shows a clear awareness of the necessity of accounting for concrete historical circumstances when assessing control measures, but these were not studied separately. As the discussion was limited to chronic health ailments, it was natural to focus on the average consumption level and the number of heavy consumers as a determinant of alcohol problems.

In many countries, adverse consequences for physical well-being of long-term heavy consumption are still of minor importance, whereas accidents and social conflicts related to single episodes of drinking may be more salient. Thus, the varying patterns of drinking and social reactions to drinking and its consequences should be considered when examining alcohol problems.

Moreover, in many circumstances, an increase in consumption, a liberalization of control systems, the diffusion of new patterns of drinking, and changes in cultural reactions to deviant drinking may be regarded as concomitants of the same historical processes. Control measures should therefore be studied in their historical context and from the point of view of their social determination. To understand the developments of alcohol control, drinking, and consequences of drinking, one has to take a broad historical look at the forces in action in each society.

PARTICIPANTS AND ORGANIZATION

The societies represented in the study were not randomly selected. They all had a history of high consumption in the 19th century, which was succeeded by a long tradition of concern about drinking, (expressed in a popular movement for temperance), and often of political struggle over alcohol issues. A modern tradition of social research on alcohol issues — a prerequisite of this study — is more or less directly a result of that history of social concern.

Our study focuses on the period from 1950 to 1975. Three of the nations included in the study — Finland, the Netherlands, and Poland — could be classed as spirits-drinking countries at the beginning of the study

period. In the early 1950s, beer was the dominant beverage in Ireland and Ontario, and beer and distilled beverages held equal shares of total consumption in California. The only country in the study where wine was the most prominent alcoholic beverage, Switzerland, is unusual among wine-drinking countries in having had an active temperance tradition. By the standards of the economically developed world, per capita consumption of alcohol was quite low in Ireland and the three spirits countries, and somewhat higher in Ontario, California, and Switzerland. By world standards, however, the case studies are drawn from parts of the world that are traditionally quite "wet." No Islamic nation is included, nor any of the other African and Asian countries where alcohol consumption has been historically low.

The following research institutes and groups participated in the International Study of Alcohol Control Experiences:

Addiction Research Foundation of Ontario, Toronto

Finnish Foundation for Alcohol Studies, Helsinki

Foundation for Scientific Research of Alcohol and Drug Use, Amsterdam

Medico-Social Research Board and Economic and Social Research Institute, Dublin

Psychoneurological Institute, Warsaw

Social Research Group, School of Public Health, University of California, Berkeley

Swiss Institute for the Prevention of Alcoholism, Lausanne.

The project group functioned as a scientifically autonomous body, but it has greatly benefited from the collaboration and support of the WHO Regional Office for Europe, under an agreement between the Regional Office and the Finnish Foundation for Alcohol Studies.

The regional and national projects were carried out independently by the participating groups. In order to facilitate the coordination of activities, Klaus Mäkelä was elected Project Director for the international aspect of the research enterprise.

The international collaboration was organized around a series of working meetings. The project originated from a planning meeting held in Toronto in 1976 which was attended by representatives of the Addiction Research Foundation of Ontario, the Finnish Foundation for Alcohol Studies, and the Social Research Group at the University of California at Berkeley. At the first working meeting in Helsinki in 1978, the participants agreed upon the scope and purpose of the project and adopted comprehensive guidelines for data collection. At the second working meeting, held in 1979 in Pacific Grove, California, a first outline of the final report was adopted. A draft report was discussed at the third working meeting in

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Serock, Poland in 1980, and the report was finalized in Niagara-on-the-Lake, Ontario in 1981.

The participating research groups agreed to carry out comparable case descriptions of the trends in alcohol consumption, alcohol-related problems, and alcohol control systems from 1950 to 1975 in their respective regions. A detailed set of guidelines specified the data to be sought in each of the three fields of inquiry (ISACE, 1979, Appendix A). In three of the societies studied — Switzerland, California, and Ontario — major alcohol control policy decisions are made more at the regional than at the national level. Whereas the case studies of the alcohol control experience in the United States and Canada specifically focus on the state of California and the province of Ontario, the Swiss report encompasses the entire country.

The national and cross-national aspects of the project were closely intertwined. The guidelines for data collection provided a common frame to enhance comparability, but participant groups were to decide individually which aspects were the most important to study in their particular society. In the course of the project, many working papers on selected aspects of the experience in each society were presented and discussed. A full list of the reports produced in the course of the project is presented as the Appendix. The participants also produced more general national or regional reports. The national reports are published in a companion volume to this report (*Alcohol, Society, and the State 2: The Social History of Control Policy in Seven Countries*).

In addition, selected papers will appear in a special edition of the *Journal of Contemporary Drug Problems* in 1982, and selected papers on the consequences of drinking will be presented in *Trends and Perceptions in Alcohol Problems in the Post-War Era: A Statistical Profile in Seven Countries* (Addiction Research Foundation, forthcoming).

APPROACH OF THE REPORT

The alcohol control experiences elucidated in this study provide a window on the overall development of post-war societies — societies whose populations shared experiences in increasing consumerism, more and varied leisure time, and an internationalization of lifestyle and culture. By examining alcohol control, we gained new insights into broad historical shifts — such as the rise in social welfare, mobility, and affluence — and into the emergence of new cultural patterns. Consequently, in this report we address broad historical and structural issues as well as the more conventional alcohol research questions.

Our exploration begins with alcohol consumption, production, and trade. To the classical causal-explanation mode of thinking, this is to

begin in the middle. "The degree of control affects the level of consumption which, in turn, affects the rate of problems" would be a formulation attractive to many alcohol and drug policy analysts and a paradigm into which much previous work would fit. But as the work of trying to make sense of the recent historical record proceeded, we were forced beyond the bounds of this paradigm. Particularly at our societal level of analysis, control and consumption and consequences became multi-dimensional domains rather than single variables. Equally important, we came to see that there was no single direction of causality among the domains, but that all were caught up in a complicated network of interactions that also involved more general cultural processes beyond the three domains. Thus, causal priority no longer provided a guide as to which strand of the network to pick up first.

In the first three chapters, patterns of alcohol consumption, alcohol problems, and control systems, are looked upon as aspects of the same historical phenomena. In the three last chapters, we focus more directly on policy, discussing alternative scenarios for the future and assessing the potentials of control measures for influencing both consumption and its adverse consequences.

We start our exposition in Chapter 2 with the recent history of drinking as consumer behaviour and of alcohol as a commodity. We attempt to discuss drinking in the same way as one would the consumption of any other commodity — commodities not seen as being linked to particular social problems. We first identify as our study period, one phase in the recorded history of wet and dry periods. We then describe how the increase in consumption was accompanied by a diversification of drinking, how the relationships of drinking to other social activities were transformed, and in what ways the cultural meanings attached to drinking changed. Alcohol production and trade is then discussed. First, we want to identify the parallel changes in the cultural significance of drinking and in the status of alcoholic beverages as an economic commodity. Second, the description of the structure of alcohol production and trade provides a background for subsequent discussion of the determinants of control policies.

In Chapter 3, we describe in what ways changes in drinking were reflected in the magnitude and mixture of alcohol problems. In view of the intimate relationships between social reaction to drinking and consequences of drinking, we also examine changes in the management of alcohol problems, the expansion of treatment services, and the division of labour between the police and social and health authorities.

In Chapter 4, alcohol control policies are analysed. We first describe the outline and historical background of the control systems as they existed at the beginning of the study period. Changes in control systems and their determinants are then analysed, with special reference to

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the lack of preventive considerations in the relaxation of control processes. In the last section, the shift in government action towards alcohol, from control policies to problem management, is discussed in terms of general changes in the role of the modern state.

Chapter 5 deals with the effects of control policies, not only on consumption and alcohol problems but also on the alcohol economy. The discussion is based on the specific historical experience of the societies studied, and particular emphasis is placed on long-term effects rather than on the immediate impact of isolated measures.

In Chapter 6, the main experiences of the study period in the three domains of consumption, problems, and control are first summarized, and the trends since 1975 briefly described. We then turn to a discussion of possible future developments of drinking and its control.

In Chapter 7, the main conclusion and recommendations from our exploration are presented.

This report summarizes the results from seven social-historical case studies. Our principal aim is to achieve a comparative understanding of the experiences of the study societies. We hope that our report may be of some assistance to international discussions and encourage countries to attend to social processes that may be important in areas beyond those dealt with in our project.

2. Alcohol Consumption, Production, and Trade

INTRODUCTION: THE LONG WAVES OF ALCOHOL CONSUMPTION

By the middle of the 19th century, alcohol intake was at a high level in most countries in Europe and North America. At the turn of the century, there was a decline in alcohol consumption which continued until the period between the two world wars. The downward tendency was particularly strong regarding distilled beverages. It was also more pronounced in the spirit-drinking countries of Northern and Eastern Europe than in countries where wine was used as a daily nutrient. Nevertheless, a declining consumption is recorded roughly within the same period in countries at different stages of economic development and representing a wide variety of alcohol cultures (Sulkunen, 1976).

Between World War II and the 1970s, consumption increased in almost all countries providing reasonably accurate statistics, with some countries approaching the peak levels of the 19th century. France was the most notable exception to this pattern. In most countries, the rate of increase in consumption slowed at some point in the 1970s, and in some countries consumption levelled off or slightly declined.

Such "long waves" of alcohol consumption are notable in at least two respects. First, they are surprisingly common across countries, despite differences in the countries' general economic development and in alcohol culture. Second, none of the factors commonly put forward as explanations for drinking or problematic drinking — such as buying power, the amount of leisure time, social misery, or industrialization and urbanization — present patterns of variation over time similar to the variations in alcohol consumption.

Trends in alcohol consumption between World War II and the early 1970s have been analysed by Sulkunen (1976). During this period, the largest growth rates were recorded in the countries that started from a relatively low level of average consumption, with the result that, in relative terms, the difference in average consumption among countries narrowed over the period. As far as choice of beverage is concerned, there was a tendency for countries to become more alike in their patterns of drinking. The component shares of the three main beverage types in the total consumption tended to converge in most countries. In other words, the

dominance of any beverage type relative to the others was becoming less pronounced. Despite the convergence, there remain strong national differences in the choice of alcoholic beverage type. The traditional beverages were not replaced by other drinks; the change was one of addition rather than substitution.

The aim of this chapter is to provide a more detailed picture of this era of increasing consumption. The first part of the discussion focuses on aggregate statistics of per capita consumption of different types of beverages. The increase in aggregate consumption will then be discussed in terms of components attributable to new groups of drinkers, new drinking situations, and changes in individual drinking habits. These components of the process of growth are closely intertwined. When new demographic groups enter the drinking scene, established drinkers are confronted with new types of drinking company and situations. And new drinking situations and new combinations of persons drinking together obviously give rise to new ways of drinking.

Accompanying the increasing wave of consumption was an expansion of the alcoholic beverage and related industries. Changes in the economic role of alcoholic beverages placed the control system in a new situation. In the latter part of this chapter, the economic significance of alcohol will be discussed from a number of points of view: national production and employment, state finances, private consumption expenditure, and special groups with an interest in the alcohol economy.

TRENDS IN AGGREGATE CONSUMPTION

Level and Beverage Structure of Recorded Consumption

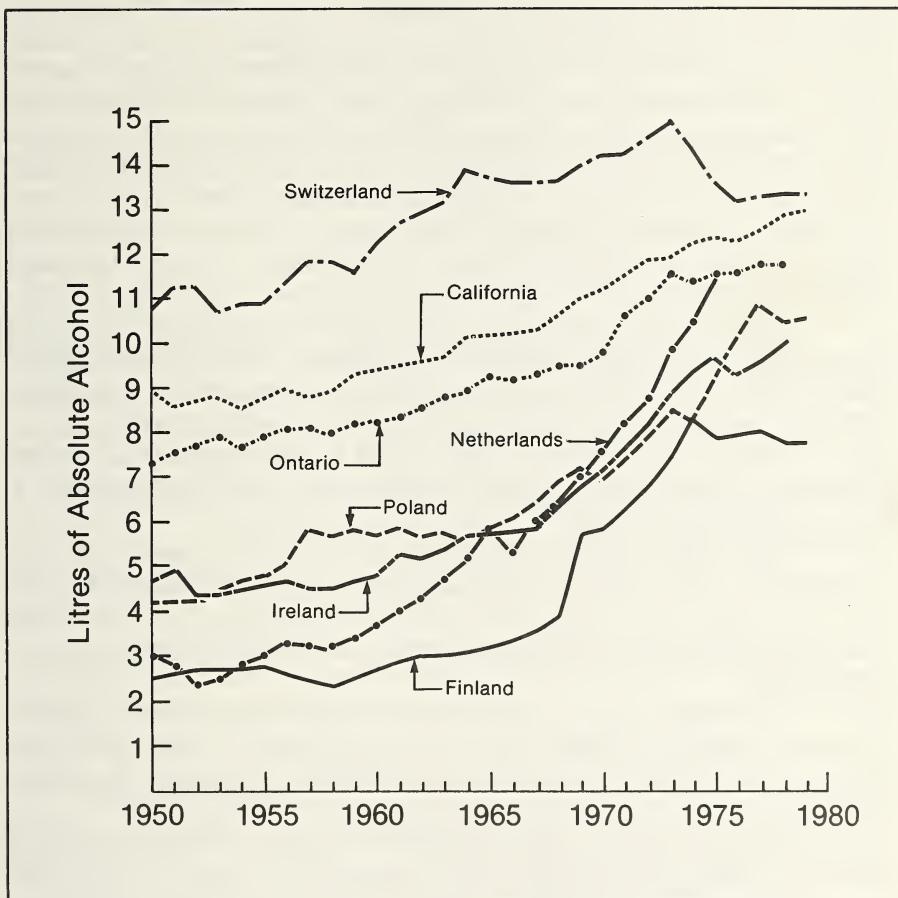
In each of the societies studied, there was a notable growth in alcohol consumption from 1950 to 1975, but among them the rate and timing of the increase varied (Figure 2.1). Some of the peculiarities in national consumption curves are readily explained by special circumstances. The sudden jump in consumption in Finland in 1969 was strongly influenced by the introduction of new and more liberal alcohol legislation (Mäkelä et al., 1981). The slight drop of consumption in Ontario in 1958 is accounted for by a strike in the major outlet for beer (Single, 1979). The sudden drop in consumption in Switzerland in the mid-1970s, related to economic recession, was accentuated by the departure of foreign workers with a high consumption (Cahannes and Müller, 1981a). Despite these and other national anomalies, the general pattern of consumption growth was remarkably similar in the societies studied.

In California, Finland, and Ireland, the consumption oscillated around a stable level for the most part of the 1950s and then increased in the 1960s. In the Netherlands, Ontario, Poland, and Switzerland, the

growth had already started by the early or mid-1950s, although in Poland there was a standstill in the increase from 1957 to 1964. In all seven societies, the growth accelerated towards the end of the study period.

FIGURE 2.1

*Total Consumption of Alcoholic Beverages in
Litres of Absolute Alcohol Per Head of
Population Aged 15 and Over, 1950-1980*



The increase was greatest in Ireland and the three spirits countries, all of which started from low levels of consumption. California, Ontario, and Switzerland, which had somewhat higher baseline consumption rates, had more moderate increases. The rate of growth from 1950 to 1975 ranged from 28% in Switzerland to 285% in the Netherlands.

In Finland, Ontario, and Poland, consumption remained stable after the mid-1970s, and in Switzerland there was even a notable decrease. In California, the growth continued up to the late 1970s, although at a slower rate, and the wave of increasing consumption showed no signs of permanently tapering off in Ireland and the Netherlands.

As the level of drinking increased, beverage preferences within each society became more diversified from 1950 to 1970 (Table 2.1, Figures 2.2, 2.3, 2.4). The share of distilled beverages in total consumption fell dramatically in Finland and the Netherlands and quite substantially in Poland. In all three countries, the proportion of alcohol consumed in wine increased, but it remained insignificant in terms of total consumption. In Finland and the Netherlands, the share of beer increased to around one-half of total consumption, whereas in Poland the share of beer remained around 20% throughout the study period. Interestingly enough, at the end of the period there were signs of a revival of the traditional spirits culture. The share of distilled beverages was again on the increase in Finland and Poland. In the Netherlands, the share of distilled beverages increased slightly from 1970 to 1975 but continued to decrease from 1975 to 1980.

A tendency towards more diversified beverage preferences was also observed in Ireland and Ontario, by tradition, beer-drinking societies. Over the study period, the proportion of beer in total alcohol consumption in Ontario decreased from two-thirds to one-half while the proportion of spirits increased by more than 10 percentage points. Similarly, in Ireland there was a decrease in the percentage of beer in alcohol consumption in favour of spirits and wine.

The major change in the structure of alcohol consumption in Switzerland in the course of the study period was a decrease in the consumption of cider from 21% to 3% of total consumption. The proportion of total consumption accounted for by beer, on the other hand, increased substantially.

California had the most stable alcohol consumption pattern among the societies studied, with the proportion of beer and spirits oscillating around 40% and wine around 20% throughout the whole period.

There were also some substantial changes within each general type of beverage. In California and Finland, the structure of wine consumption changed dramatically. In 1950, three-fourths of the alcohol consumed as wine in California was fortified wine as opposed to table wine. By 1975 this proportion had been reduced to less than one-fifth (Collins and Milkes, 1980). In the 1950s, wine consumption in Finland consisted almost exclusively of domestic fortified wines. The consumption of wines fluctuated from year to year inversely with the consumption of distilled spirits — an indication that both groups were close substitutes for each other. Later on, wine consumption included a growing share of light wines,

which probably indicates a differentiation of wines from spirits (Österberg, 1979a, 1981). In Ontario, too, there was an increasing consumption of table wine and a decline in fortified wine, in part as a result of differential price increases aimed at reducing the consumption of port and sherry among skid row inebriates. There was also an increase in the consumption of imported wine over and against domestic wine (Single and Giesbrecht, 1979). A similar trend in imported wine has been recorded in Switzerland (Cahannes and Müller, 1980).

Consumption of distilled beverages also diversified. In California, what was largely a whisky market in 1950, with a role for gin, became a highly diversified spirits market by 1975, with "white goods" — vodka, tequila, and rum — cutting into whisky sales (Bunce et al., 1981). In Ontario, the consumption of other types of spirits increased at a more rapid pace than the traditional Canadian rye whisky. In absolute terms, however, the increase in the consumption of rye whisky was greater than any other type of distilled beverage (Single and Giesbrecht, 1979). In a similar fashion, the exclusive dominance of the traditional spirits of choice was challenged in the Netherlands and Switzerland. In the former country, geneva was supplemented by whisky and brandy (Produktschap voor Gedistilleerde Dranken, Annual Reports), while in Switzerland, the predominance of fruit spirits was challenged (Cahannes and Müller, 1981a).

The beer market also underwent some changes, but in the opposite direction. In most of the study societies, there tended to be less diversity in beer products and a decline in local or less prevalent products such as bock beer and porter. On the other hand, the alcohol content became more variable with the promotion of low-alcohol content beers and higher-alcohol content malt liquors (Bunce et al., 1981; Single et al., 1981).

The transformations of the beverage structure of aggregate consumption can, to some extent, be attributed to the decline of the traditional drinking practices embedded largely in rural customs and shrinking population groups. In Switzerland, the production of cider was closely linked to traditional agriculture as a practical way of using up poor quality fruits. With the decline in the number of farms and with improved techniques that permitted the use of inferior fruit without fermentation, the production of cider decreased, and cider was replaced by beer. Other examples of one beverage substituting for another is the inverse relationship between the annual consumption of fortified wines and distilled spirits in Finland in the 1950s, and the period between 1950 and 1964 in the Netherlands and Poland, when not only did the share of spirits in total alcohol consumption decline but the absolute level of spirits consumption also fell.

For the most part, however, changes in the beverage composition of consumption reflect the addition of new drinking practices, sometimes

associated with new drinking populations. An example of this is the rise of a market for gin and vodka in traditionally beer-drinking countries, and the growth of a market for beer among young city dwellers in traditionally wine-drinking countries.

The decline in the share of total consumption contributed by distilled beverages in the spirits countries did not mean that consumption of spirits decreased. New beverages were added to traditional ones rather than substituting for them (de Lint, 1981; Mäkelä et al., 1981; Moskalewicz, 1981). The most dramatic example of this process comes from Finland, where the promotion of beer-drinking in the 1960s was followed by a rapid increase in spirits consumption. The same basic pattern was repeated in California, Ireland, Ontario, and Switzerland: new products tended to expand rather than replace consumption (Single and Giesbrecht, 1979; Bunce et al., 1981; Cahannes and Müller, 1981c). Thus, Ontario wine consumers developed more sophisticated tastes in wine and showed increasing willingness to buy more expensive imported wine, but these new drinking patterns did not lead to a decrease in domestic wine consumption.

Product differentiation may have been of some importance for the recruitment of new consumers by breaking down cultural barriers which insulated certain demographic groups from drinking. Youth and women were more likely to accept new types of light or mixed drinks than the traditionally dominating beverages associated with adult male drinking. But once they started to drink, they eventually switched to more traditional beverages. The fate of pop wines in California can be interpreted along those lines (Bunce et al., 1981). Fruit-flavoured wines were launched to attract the youth market, but some years after their introduction the youthful audience moved on from pop wines to ordinary wines.

Despite the homogenization of beverage preferences across countries, cultural variations persist. The share of wine in total consumption in 1975 ranged from nearly one-half in Switzerland to 5% in Ireland, and the share of distilled beverages ranged from 67% in Poland to 18% in Switzerland. It should also be noted that in Finland and Poland, the shift towards lower alcohol content beverages had apparently ended or been reversed.

TABLE 2.1 *Structure of Consumption of 100% Alcohol by Type of Beverage (%), 1950-1980*

	1950	1960	1970	1975	1980
California ^a					
Distilled beverages	43	43	44	40	43 ¹
Wine	18	18	18	21	20 ¹
Beer	39	38	38	39	37 ¹

TABLE 2.1
(continued)Structure of Consumption of 100% Alcohol by
Type of Beverage (%), 1950-1980

	1950	1960	1970	1975	1980
Finland^b					
Distilled beverages	80	71	42	49	47
Wine	5	10	12	12	12
Beer	15	19	46	39	41
Ireland^c					
Distilled beverages	26	24	29	32	32
Wine	3	4	4	5	9
Beer	72	72	67	63	60
Netherlands^d					
Distilled beverages	70	44	36	39	32
Wine	5	11	13	15	18
Beer	25	45	51	46	50
Ontario^e					
Distilled beverages	28	32	35	40	39 ¹
Wine	7	7	9	9	12 ¹
Beer	66	62	56	51	49 ¹
Poland^f					
Distilled beverages	78	62	63	67	71 ²
Wine	4	15	14	13	15 ²
Beer	18	23	23	20	14 ²
Switzerland^g					
Distilled beverages	15	16	18	18	19 ¹
Wine	42	42	43	46	48 ¹
Beer	23	32	36	33	30 ¹
Cider	21	10	4	3	3 ¹

¹ 1979² Provisional data

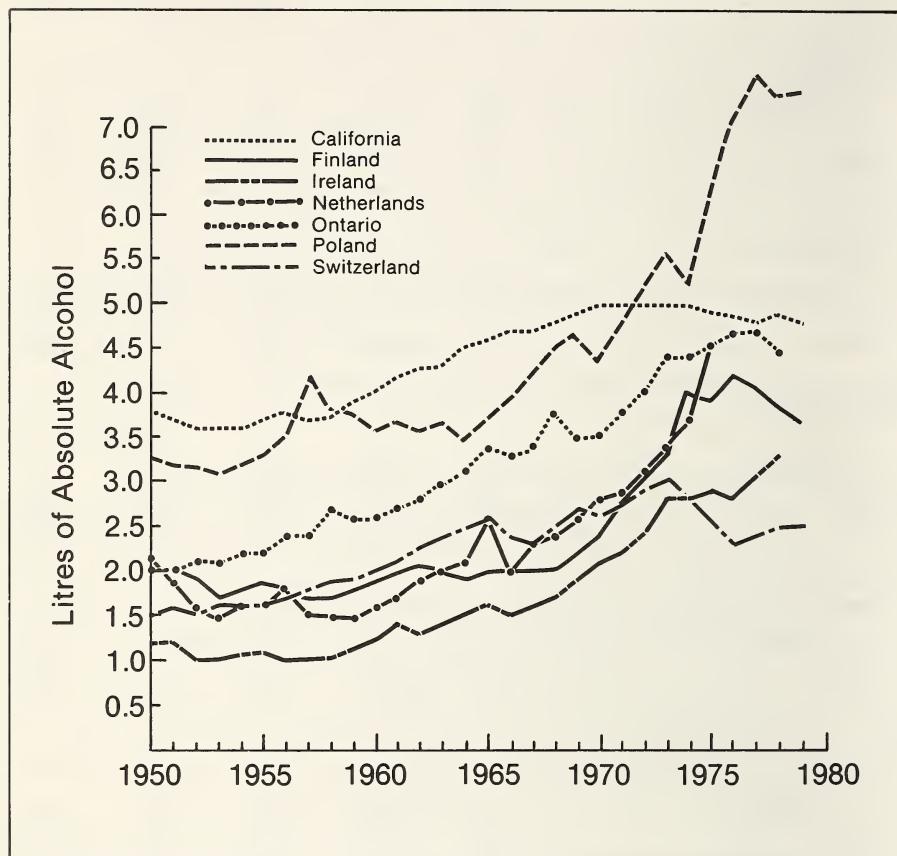
The detailed classification of beverages varies from one society to another: e.g. fortified wines are included in distilled beverages in Switzerland but in wines in Finland.

Sources:

^aCalifornia State Board of Equalization; Collins & Milkes, 1980; ^bAlkon vuosikirja;^cWalsh & Walsh, 1981; ^dProduktschap voor Gedistilleerde Dranken, Annual Reports;^eLiquor Control Board of Ontario; Annual Reports; ^fWald et al., 1981;^gCahannes & Müller, 1981a.

FIGURE 2.2

Consumption of Distilled Beverages in Litres of Absolute Alcohol Per Head of Population Aged 15 and Over, 1950-1980

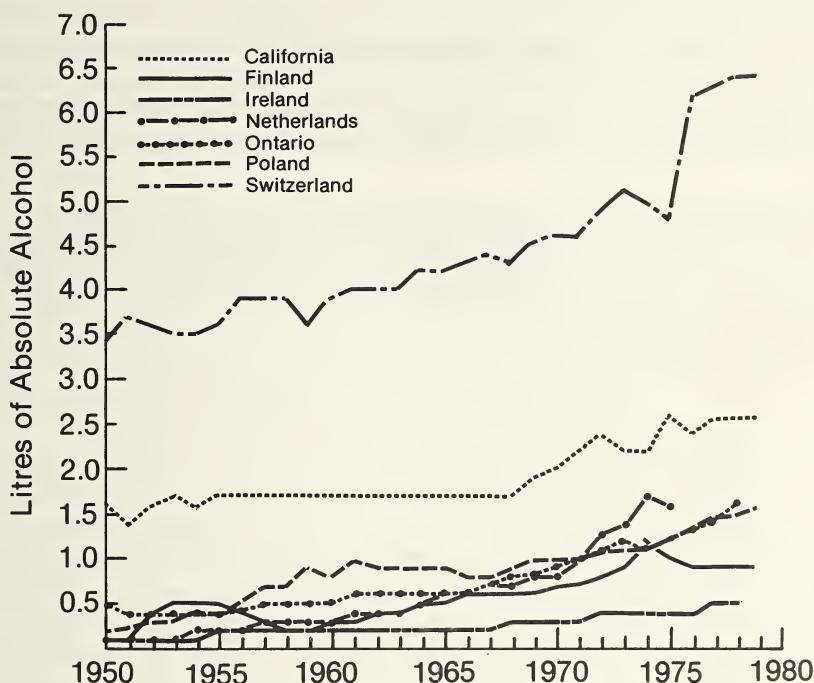


Unrecorded Consumption

Unrecorded consumption is of interest, first, because of statistical accuracy; secondly, because variations in unrecorded consumption may be indicative of changes in cultural patterns of drinking, and thirdly, because such consumption may fluctuate with the availability of legal alcohol.

The sources of unrecorded consumption include the following: (1.) unrecorded production in the form of homemade alcoholic beverages or illicit production; (2.) unrecorded importation such as the importation of small amounts for personal use, or illegal smuggling; (3.) unrecorded consumption by alcohol industry workers; (4.) consumption of non-beverage alcohol and (5.) consumption of alcohol outside the country.

FIGURE 2.3

Consumption of Wine in Litres of Absolute Alcohol Per Head of Population Aged 15 and Over, 1950-1980

Special efforts were made in California (Collins and Milkes, 1980), Finland (Mäkelä, 1979), Ontario (Single and Giesbrecht, 1979), and Switzerland (Cahannes and Müller, 1981a) to estimate the magnitude of each of these segments of unrecorded consumption, and supporting evidence is available from Ireland and Poland. For specific beverage categories, the impact of unrecorded production may be of some importance, but in none of the societies studied does this significantly affect the overall consumption figures.

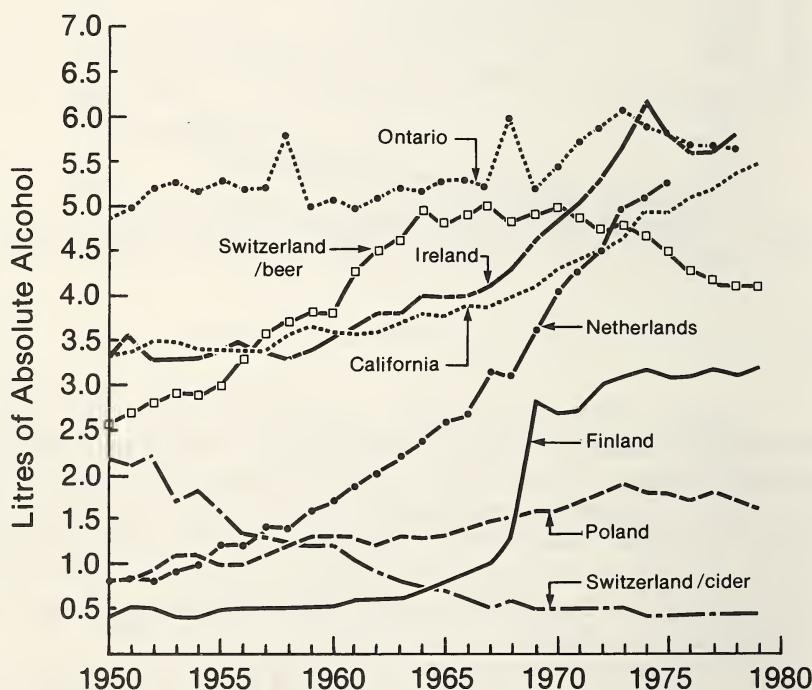
In California, homemade wine has become more and more popular, but the volume of homemade wine is quite low (Collins and Milkes, 1980: 7). In Ontario, homemade wine accounts for approximately 40% of wine consumption (Single and Giesbrecht, 1979). In Poland,

homemade wine is deemed the major source of unrecorded consumption and in the early 1960s, it was estimated to account for about 20% of wine consumption (Świecicki, 1963). In Finland, the corresponding figure is about 10% (Mäkelä, 1979). However, in all of these contexts the effect of homemade wine on total alcohol consumption is quite small because of the relatively low overall consumption of wine. For example, in Ontario the inclusion of homemade wine in consumption estimates would increase total alcohol consumption by only 6% or 7% (Single and Giesbrecht, 1979).

Only in Switzerland may unrecorded distillation in rural areas have been significant enough to have had any impact on spirits consumption figures, and it probably decreased over the study period (Cahannes and Müller, 1981a). In Ireland, illicit distillation of whisky was a major

FIGURE 2.4

Consumption of Beer (and, in Switzerland, of Cider) in Litres of Absolute Alcohol Per Head of Population Aged 15 and Over, 1950-1980



problem during the 19th century, but is now regarded as a small and localized phenomenon. Similarly, illicit distillation by now has no significant impact on consumption figures in California, Finland, Ontario, and Poland (Galaski, 1976; Mäkelä, 1979; Single and Giesbrecht, 1979; Collins and Milkes, 1980).

Drinking non-beverage alcohol was fairly widespread in Finland at the beginning of the study period but had practically vanished by the 1970s (Mäkelä, 1979). Data from California (Collins and Milkes, 1980), Ontario (Giesbrecht, 1979), and Poland (Bielewicz and Godwod-Sikorska, 1979) indicate that drinking of non-beverage alcohol had little significance even among homeless alcoholics, and it is equally safe to say that the phenomenon was practically non-existent in Ireland, the Netherlands, and Switzerland.

In general, in industrialized countries it seems that the illicit production and home production of alcoholic beverages are a declining factor in unrecorded consumption, mainly because of the decline in the main population base for non-industrial production, namely, rural entrepreneurs outside the industrial economy. While in some countries home production of wine and sometimes beer has become a popular hobby, this is likely to remain insignificant in overall consumption.

On the other hand, unrecorded consumption in the form of consumption outside the country of residence and of personal duty-free importation is of growing significance. In Finland, it accounted for one-half of all unrecorded consumption by the end of the study period and represented almost 5% of the recorded consumption (Mäkelä, 1979). In Switzerland, too, unrecorded imports for personal use were a major source of unrecorded consumption by the end of the study period (Cahannes and Müller, 1981a). In Ireland, the recent extension of duty-free concessions to travellers to and from Britain has increased the importance of this type of unrecorded consumption.

The growth of mass tourism has exposed large segments of national populations to the drinking styles and habits of other cultures, in circumstances likely to encourage more drinking than in everyday life. Alcohol is one of the predominant commodities in duty-free shops at airports and other customs borders. Allowances and rules which were originally minor concessions covering personal use in transit have become niches for the operation of substantial vested interests. In some cases, the operation of the transportation system itself at its present level of service and profitability depends on attracting passengers travelling for the sake of procuring tax-free alcohol.

Despite these trends, it is clear that unrecorded consumption remains only a small portion of total consumption in all the study areas. Different segments of unrecorded consumption have fluctuated over time but without any significant impact on per capita figures. Detailed data over

time for Finland indicate that although the composition of unrecorded consumption changed, the total amount remained fairly constant throughout the study period (Mäkelä, 1979). The increase in recorded consumption was thus not accompanied by a decrease in unrecorded consumption, although the proportion of unrecorded to recorded consumption diminished from approximately 25% to less than 10%.

In regard to statistical accuracy, consumption by foreign tourists, unrecorded export, and waste represent sources of error in the opposite direction and tend to exaggerate per capita figures for the resident population. Consumption by tourists has been cited as a major source of error for some countries, but it does not appear to be significant in the societies included in this study. Detailed calculations for Finland (Mäkelä, 1979), Ontario (Single and Giesbrecht, 1979) and even Switzerland (Cahannes and Müller, 1981a) indicate that consideration of the consumption by tourists does not alter the basic conclusions from cross-national comparisons or comparisons over time. When the number of nights spent abroad by the Swiss is subtracted from the number of nights spent in Switzerland by foreigners, the net excess represents only three per million of the total of nights spent in Switzerland and can hardly have any impact on consumption rates.

Public and Private Drinking

Another important dimension of styles of drinking that, in principle, can be studied with aggregate statistics is the distribution between on-premise and off-premise consumption. Despite the dearth of systematic data on changes over time, some general features clearly emerge.

At the beginning of the study period, the proportion of public drinking tended to be considerably higher in the four beer or wine societies (Ireland, Ontario, California, Switzerland) than in the three spirits countries (Finland, Netherlands, Poland). Corresponding differences between beverage groups prevail within each society. The share of on-premise drinking in total consumption in Finland in 1975 was 35% for beer, 19% for distilled beverages, and only 7% for wine (Österberg, 1979a, Tables 1-6). In Ontario, the dollar value of on-premise beer sales represented 28% of all beer sales in 1970, whereas the corresponding percentage for spirits was 10% and that for wine only 8% (Schmidt, 1972). In Switzerland, the proportion of wine and distilled beverages drunk on-premise is similarly lower than that of beer (Cahannes and Müller, 1981a). In Ireland, about 80% of beer and about 60% of spirits are consumed on-premise (data from unpublished industry consumer surveys).

Over the study period, the relative importance of private drinking increased, particularly in countries where traditionally the proportion of public drinking had been high. In Ireland, off-premise sales of spirits

have grown rapidly. Also the growth in sales of wine through supermarkets is an indication of the increasing private consumption of wine (Sulkunen, 1978, Table 15).

In Switzerland, more than 85% of the production of beer was sold for on-premise consumption in 1956. In 1975, this had fallen to less than 60% (Cahannes and Müller, 1981a).

According to one estimate, 90% of all alcohol was sold in bars and restaurants in the late 1940s in the United States as a whole; by 1970 the proportion was one-third (Kluge, 1971). Drinking patterns in California undoubtedly mirrored this major change in national drinking habits during the study period (Bunce et al., 1981).

In Ontario, the split between off/on-premise consumption of alcohol was 65/35 in 1953, 81/19 in 1978. The most important change was in the pattern of beer-drinking. The proportion of beer consumed on-premise dropped from one-half in 1953 to one-fourth in 1978 (Gilbert, 1979). The increase in the relative importance of private drinking of beer seems to have occurred in the 1950s and 1960s and did not continue in the 1970s (Single and Giesbrecht, 1979: 47). The share of on-premise consumption in spirits consumption dropped from one-third in the 1950s (Popham, 1976: 60) to one-tenth in 1970 (Schmidt, 1972).

Trends in former spirits countries are less uniform. In Finland, the proportion of alcohol consumed in public was stable at about 20-25%. A temporary increase in public consumption occurred in the years 1969-1973, when conditions for on-premise sale were particularly favourable (Österberg, 1979a). In Poland, the share of on-premise consumption of spirits remained more or less stable over the years 1951-1968. From 1968 on, public drinking declined in relative importance, from 21% in 1968 to 10% in 1978 (Moskalewicz, 1981). In the city of Amsterdam, the share of on-premise sales in spirits consumption dropped from 53% in 1961 to 21% in 1974, and a similar trend was recorded in the Hague (Commission of the European Communities, 1976).

The increased share of private drinking in total alcohol consumption should be seen as one facet of a general change in cultural patterns. One obvious explaining factor, however, deserves immediate mention: the price differential between on-premise and off-premise consumption increased over the study period as a consequence of rising wages in service industries.

CHANGES IN THE SOCIAL BASE AND STYLES OF DRINKING

In spite of numerous national peculiarities, it is relatively simple to summarize trends in aggregate consumption across various drinking

cultures. When we move into an account of the social base of drinking and transformations in styles of drinking, it becomes difficult to give adequate coverage to cultural and demographic variation between and within countries. In the following, the main emphasis is on alcohol as a recreational drug. It is particularly the social and cultural position of recreational drinking which has been transformed over the study period, not only in spirits and beer cultures but in wine countries as well.

The Social Base of Drinking

There seems to be a general tendency to regard access to the means of intoxication as a prerogative of full citizenship (Knupfer and Room, 1964). Particularly in cultural settings where alcohol has been defined as an especially dangerous commodity and handled separately from ordinary commerce, access to alcohol was differentiated legally and culturally for different segments of the population.

A picture of social differentiation in drinking at the beginning of the study period must, for several societies, be projected back from later survey data or inferred from qualitative sources. But there seem to be some similarities to the picture across all seven study societies, despite strong societal differences in the overall cultural position of alcohol. Abstention seems everywhere to have been more common among women than men, more common among older than among younger adults, more common among the poor than among the rich. In societies with a substantial pool of abstainers, just sex, age, and social class, taken together, would provide a very strong indication of whether an individual would be a drinker or an abstainer. In most of the study societies, abstention also seems to have been more common in the countryside than in the towns.

In terms of heavy drinking, at the other end of the spectrum the picture of distribution by social differentiation was also fairly uniform, though somewhat more complicated. In all the study societies and by any measure of heavy drinking, men were far more likely than women to be heavy drinkers. Measured in terms of regular or sporadic drunkenness, heavy drinking was more common among younger adults than older adults, and apparently more common among poorer people than among richer people. The patterns for drunkenness were thus roughly the inverse of those for abstention, except that the poor were more likely than the rich both to be abstainers and to get sporadically drunk.

The post-war period witnessed the entry into the drinking population of new groups which earlier had been more or less excluded from drinking by social custom. Chief among these were women, teenagers, and, in some countries, rural residents. In addition, two of the societies studied experienced an influx of immigrants or temporary guest workers with high levels of consumption. In Switzerland, foreign workers accounted for almost a fifth of the population during the peak years of

economic growth. These guest workers were in their most active drinking age and came mostly from Italy and Spain, both countries with traditions of a high intake, particularly of wine (Cahannes and Müller, 1981c). Ontario received a significant flow of immigrants from Europe, many of whom were Italians (Single et al., 1981).

TABLE 2.2

Percentage of Non-Drinkers in the General Population in Selected Years

	Age Group	% Non-Drinkers ¹		
		Men	Women	Both Sexes
California ^a				
1960	21+			20
1974	18+			17
Finland ^b				
1968	15-69	13	43	25
1976	15-69	9	20	13
Ireland ^c				
1968	15+			52
1974	15+			43
Netherlands ^d				
1958	20+	14	21	18
1976	20+	7	18	12
1976	12+	14	24	19
Ontario ^e				
1950	21+	21	44	30
1976	18+	14	25	20
Poland ^f				
1961	20+	8	25	16
1976	16+	12	25	19
Switzerland ^g				
1975	15-74	7	15	11

¹ In each of these surveys, respondents were defined as non-drinkers if they reported no consumption of alcoholic beverages during the last 12 months (24 months in the Swiss study).

Sources:

^a California Field Poll 6003, 1960 Cahalan et al., 1976; ^bMäkelä, 1969a and Simpura, 1978a; ^cWalsh, 1980; ^dSijlbing, 1978; ^ePopham & Schmidt, 1958 and Smart & Goodstadt, 1976; ^fSwiecicki, 1963 and Janik, 1976; ^gWüthrich & Hausheer, 1977.

Survey data on changes in the prevalence of drinking do not go far back in time, but for most of the study societies they cover the period of the chief increase in consumption (Table 2.2). When comparing rates of abstinence over time and among countries, it should be kept in mind that the lower age limit varies from one survey to another.

At the end of the study period, Ireland had by far the highest proportion (about 40%) of non-drinkers. In California, Ontario, and Poland, the rate of abstinence was about 20%. In Switzerland, and, somewhat surprisingly, in the Netherlands and in Finland, it was a little above 10%.

Data for Switzerland refer only to the end of the study period, but there are grounds for believing that drinking was already nearly universal, above all in the Francophone regions, at the beginning of the period. Consequently, there was no room for a significant expansion of the drinking population. Regional variation in the rate of abstinence may, however, have been greater in the 1950s. In 1975, the rate of abstinence was nearly the same in the three main linguistic regions despite persistent differences in other aspects of drinking (Wüthrich and Hausheer, 1977). We have no data from Poland for the beginning of the study period, but at least from the early 1960s to the mid-1970s the rate of abstinence did not decline. The same is true for California, and for the U.S. as a whole we know that the rate of abstinence has remained fairly constant throughout the last three decades (Cahalan et al., 1969; Clark and Midanik, 1980).

The data at hand reveal a significant decline in abstinence in Finland, Ireland, the Netherlands, and Ontario. As the rate of abstinence was already fairly low in the Netherlands before the consumption increase seriously began, only a small part of the increase may be attributed to the recruitment of new drinkers. In Ontario, the rate of abstinence dropped by 10 percentage points over the study period. The reduction in abstinence seems to have occurred between the late 1950s and the late 1960s and did not continue in the 1970s (Single and Giesbrecht, 1979). In Finland and in Ireland, the period of the fastest growth in consumption coincided with a marked drop in abstinence. Nevertheless, the percentage of the increase in consumption that may be attributed to the declining proportion of non-drinkers is wholly marginal in Finland (Sulkunen, 1979). Only in Ireland may the expansion of the drinking population have had any significant impact on per capita consumption figures, and even there more than half of the increase, at a minimum, has to be attributed to increased consumption among established drinkers (Walsh, 1980).

We may conclude that only exceptionally did the recruitment of new drinkers have any notable direct impact on overall consumption. Culturally, however, the decline in abstinence signified the dwindling of the temperance ethos. Already at the beginning of the study period, abstinence tended to be more prevalent in outlying districts and among the poor or

socially isolated population groups. Nevertheless, abstinence was historically also connected with deeply felt convictions. Of the remaining non-drinkers, only very few exhibit any ideological fervour. California abstainers are likely to give inconsequential rationales for not drinking (Knupfer and Room, 1970). In Finland, where the organizational and bureaucratic positions of the temperance movements are still largely intact, the movement has practically no mass membership left (Mäkelä, 1978a).

The relative shrinkage of the non-drinking group tends to be larger among men than among women (Table 2.2, p. 21). As there was a larger reservoir of non-drinking women to start with, however, in absolute numbers women predominate among those who have recently entered the drinking population.

Women thus formed a substantial majority of the new drinkers, and in Finland the share of women in national consumption increased from 13% in 1968 to 21% in 1976 (Mäkelä, 1969b; Simpura, 1978b). Nevertheless, in all countries the average consumption among women remains far below that of men. The increase in female drinking is less important in its implications for alcohol problems among women than as an indication of changes in the social position of both women and drinking, particularly in cultures where drinking used to be a male prerogative and where drinking occasions were insulated from daily routines. In Ireland, social sanctions used to be applied against women entering public houses or drinking in public. Since World War II, there has been a gradual erosion of the male dominance in public houses (Walsh, 1980). Finnish survey data show that the proportion of all-male drinking situations decreased whereas the proportion of all-female drinking occasions increased from 1969 to 1976 (Mäkelä et al., 1981).

In all of the societies studied, with the exception of Switzerland, drinking used to be an adult privilege and children were seldom allowed to drink with their parents. In every cultural situation with restrictions on teenage drinking, there is evidence that a substantial proportion of teenagers, particularly males, were drinking before the legal age throughout the study period, but the mean age at first drink dropped over time. Blane's and Hewitt's 1977 analysis of the U.S. as a whole shows widespread noncompliance in the 1950s with the legal minimum age for drinking of 21 in most parts of the U.S. The average age of initiation of drinking dropped only a little in the study period. Heavier drinking did become more common among teenage boys in the 1960s, and then stabilized, while the reduction of the legal drinking age in most of the U.S. occurred about 1970. In Finland, the age of beginning drinking dropped substantially during the 1960s, although it stabilized or even rose again slightly in the later 1970s (Ahlström, 1979). An increase in teenage drinking is similarly documented in Ontario (Smart, 1980) and the Netherlands (Gadourek, 1963; Sijlbing, 1978).

Widespread teenage drinking, despite adult disapproval, reflects the operation of a substantially autonomous youth culture in which drinking plays an important role. Particularly where the society has legally restricted drinking to adults, drinking becomes for the underaged a claim to adulthood — one of a long series of such claims, and one more easily attained than others. In such societies, teenage drinking is, perforce, somewhat segregated even from the legally tolerated heavy drinking of those in the first few years beyond majority.

In a Finnish survey, respondents were asked to indicate the acceptable minimum age for drinking under various circumstances (Mäkelä, 1980b). Older respondents did not distinguish between drinking at family meals and drinking with peers. They evidently thought that by the time people are allowed to drink they must also be mature enough to drink with their peers. Younger respondents, in contrast, accepted drinking with the family at a clearly lower age than drinking with peers. This can be seen as an indication of how drinking *per se* is no longer associated with adulthood and of how alcoholic beverages are becoming culturally integrated with family life. Drinking with the family has not, however, replaced drinking that is beyond the reach of adult control. The number of teenagers having consumed alcohol in the company of their parents increased from the 1960s to the 1970s, but so did the proportion who had drunk with their peers (Ahlström-Laakso, 1975).

Trend data which compare drinking by different occupational groups or by rural and urban residence are generally not available. With reasonable confidence it can be said, however, that with rising affluence, weakening local traditions, and increased availability of commercially produced alcoholic beverages, the differences between urban and rural areas and among occupational groups are now less conspicuous than they used to be. Nevertheless, there are still wide variations in drinking and particularly in heavy drinking according to major social differentiations.

Diversification of Drinking Situations

Not only were large groups of the population more or less secluded from drinking at the beginning of the study period, much of the drinking was also circumscribed within special situations outside of the normal flow of daily life.

In all of the study areas, there was a good deal of temporal specificity to drinking — a regular, daily, weekly, and seasonal rhythm. Drinking was more an evening than a daytime activity, and more a weekend than a weekday one, this reflecting its association with leisure time and theoretical exclusion from work time. Drinking as a weekend-only activity was especially prominent in Finland and Ontario, but also marked in all areas other than Switzerland. Especially heavy consumption was associated with the Christmas and New Year holiday season. In Poland,

name days provided occasion for heavy drinking; and in Finland, mid-summer is traditionally dedicated to drinking and revelry. Over the study period, this temporal rhythm became less pronounced, partly because of the extinction of seasonal fêtes but mainly because of the emergence of many less ceremonial drinking occasions in between the traditional ones. In Finland, Saturday's share of the weekly consumption among men was reduced between 1968 and 1976, but the proportion of adult males having consumed alcohol on the preceding Saturday increased (Mäkelä, 1970; Simpura, 1978b).

Particularly in the spirits countries, as well as in California and Ontario, drinking tended to be separated not only from work but from other leisure activities. In Ireland, drinking tended similarly to be an isolated activity indulged in for its own sake. Leisure establishments such as theatres and cinemas did not have on-licence facilities and, until recently, selling of alcoholic beverages was not, as a rule, allowed at sports events in North America (Mosher, 1979). At least in the Nordic countries, the official control policy was strongly opposed to entertainment programs and dancing in licensed establishments, for fear that they might entice youth to drinking places (Alkoholpolitiska utredningen, 1974; Koskikallio, 1981).

Over the study period, alcohol became freely available in many leisure establishments. Also, in other respects the spectrum of drinking situations greatly diversified; alcohol became customary, and drinking became integrated with an ever growing number of daily routines and activities. Particularly in countries where drinking was traditionally an occasion for intoxication, occurring on well-defined and relatively rare occasions, the modal pattern changed towards one in which more moderate quantities are drunk more frequently but with less ceremony. There is considerable evidence, however, to indicate that the spread of alcohol into new situations did not displace the tradition of occasional heavy drinking, at least not in such countries as Finland and Poland (Mäkelä et al., 1981; Moskalewicz, 1981).

The diversification of drinking practices was materialized in on-licence establishments. At the beginning of the study period, the physical arrangements and decoration of bars and restaurants tended to be rather uniform in each society and represented minor variations of a few basic types traditional in each culture (cf. Csikszentmihalyi, 1968).

More than in any other area studied, drinking in Switzerland was integrated with eating. While there were alcohol-oriented bistros and taverns, snacks would be available as a matter of course, and much public drinking was in restaurants. Drinking establishments were not highly differentiated in terms of architecture or social function.

In Ireland, on the other hand, as in Britain, pubs were special places, the "working man's clubhouse" for male camaraderie, in a tradi-

tion reaching back to the 19th century, when drinking moved out of the workplace (Stivers, 1976) into this architecturally specific establishment. In the Netherlands, also, taverns were often ancient establishments, relatively distinct from eating places.

In Finland, public drinking was, at the beginning of the study period, restricted on the one hand to upper middle-class people and on the other to heavy-drinking males. Public drinking was allowed only in "restaurants" that were fairly strictly controlled in their physical arrangements. Many of these places came, however, to derive their primary profits from alcohol sales (Koskikallio, 1977). In Poland, licence regulations for most establishments stipulated that alcohol sales were not to exceed 50% of the total income.

In North America, the traditional alcohol culture was severely disrupted, not only by Prohibition itself, but also as a deliberate result of the political compromises which accompanied Repeal. A major rhetoric of justification for Repeal was to shift the blame for the "alcohol problem" from alcohol itself to the "evils of the old-time saloon," so that the control legislation which accompanied Repeal was aimed specifically at preventing the resumption of the old drinking institutions (Room, 1973). In Ontario, public drinking was initially granted only to males in large public beer halls; "cocktail lounges" were introduced in five principal cities (with considerable furor) only in 1947, 20 years after the Ontario Temperance Act was repealed (Silcox, 1975). In California, drinking places, until recently, were forbidden to call themselves "saloons," "bars," or "taverns" (Mosher, 1979).

The following data from Ontario illustrate the trend toward greater variation in the types of on-premise outlets for alcohol (Single et al., 1981). In 1950, there were less than 2,000 licensed outlets where alcohol was served on-premise. Nearly half were hotels, while public houses (which served only beer) accounted for 20% of the licensed establishments. By 1979, there were more than 7,000 licensed on-premise establishments, only 19% of which were hotels and 1%, public houses. The most prevalent type of on-premise outlet had become taverns, while there were also marked increases in the number of social, fraternal, labour, and veterans' clubs licensed to sell alcohol. Alcohol had also become available in such places as theatres and recreational centres.

The study period saw a tremendous diversification of licensed establishments, and traditional drinking locales were supplemented by nightclubs, small informal eating places, self-service cafeterias, discothèques, and so forth. Establishments imitating drinking places from all parts of the world abounded not only in cities but all over the country, and by now none of the areas studied is without its share of Italian trattorias, English pubs, French restaurants, and American bars.

SOCIAL CONTEXT OF CHANGES IN CONSUMPTION

There is no single explanation for the changes in consumption pattern. The factors involved vary from one place to another, and the causal direction of the effects is often unclear. Specific factors influencing alcohol consumption have often been part of a general process of societal change, and so they cannot be winnowed out.

Probably the most extensive quantitative literature on the correlates and determinants of consumption is the econometric literature on the income and price elasticity of consumption. These studies have reaffirmed that consumption of alcohol, as of other commodities, is responsive to changes in income and price. Nevertheless, there is considerable variation by time and place in the value of the elasticities — that is, the elasticities themselves are historically conditioned. In the longer run, it is clear that the "long waves" of consumption mentioned earlier cannot be accounted for by changes in income or in price. The period 1950–1975 was marked by a general rise both in affluence and in alcohol consumption in the societies included in the study, but these trends may be most appropriately viewed as specific indications of general changes in the structure and culture of the societies.

In a similar way, it can be shown that urban occupation or urban residence is correlated in most countries with the use of alcohol, whereas no simple statistical relationship can be established between the rates of urbanization or industrialization and consumption of specific groups of alcoholic beverages or total alcohol consumption across the OECD countries (Sulkunen, 1980).

Age is also closely related to individual patterns of drinking, but changes in the age structure of the population have had little direct effect on per capita consumption figures. The coming of age of those in the post-war "baby boom" population bulge coincided with the period of steepest rise in consumption in several countries, but in terms of a direct effect of age distribution on consumption, it can only have had a marginal influence (Maloff and Gerstein, 1980; Österberg, 1979a). The "baby boom" may have had an influence only insofar as it ushered in an unusually populous generation capable of acting as a "carrier" of new cultural values.

Leisure is one further variable that undoubtedly has a bearing on the level of drinking. Again, the relationship between the modest growth in leisure time in the post-war period and drinking is not a mechanical one. In many developed countries, while the increase in leisure time was, in fact, greater in the period between the two world wars, alcohol consumption was actually lower (Sulkunen, 1980).

We thus conclude that the factors that social scientists tend to look at first are not very successful in explaining historical fluctuations in consumption. The reason for this lies partly in the fact that drinking is a

composite phenomenon. Alcohol has many different uses (Sulkunen, 1976; Mäkelä, 1979). In terms of its physical properties, alcohol is used as a beverage, as a source of nutrition, as a medicine, as a psychoactive drug. In terms of its cultural meanings, there is an even wider variation in the uses of alcohol. Alcohol can be consumed as a sacrament, as a thirst-quencher, as a symbol of collective homage (a toast), as a fortifier, as a sedative, as a sign of sophistication.

Patterns of drinking by nations, subcultures, and other aggregates can be seen as being composed of the patterns of individual drinkers. However, individual drinking patterns are set not in isolation but rather in social interactions and with reference to others' drinking (Skog, 1980). Aggregate patterns of consumption thus reflect collective understandings of, as well as individual proclivities toward, drinking.

We know that an aggregate stability in patterns of consumption can be the net result of a great deal of variation at the individual level, with those increasing their drinking cancelling out the effects of those decreasing their drinking (Clark and Midanik, 1980). Moreover, changes in aggregate consumption may conceal opposite changes in the prevailing uses of alcohol. We have already referred to France as an exception to the general post-war wave of increasing consumption. It may well be that the French case would turn out not to be all that exceptional after all, if the data had allowed for a more detailed analysis of the components of aggregate consumption. It may be that traditions of nutritional use of table wine have declined to such a degree that this has more than neutralized the tendency of urban groups to acquire international patterns of drinking and to increase their consumption. If this had been the case, then exactly the same processes would have been identified in France as in many other countries; only the relative contribution to the aggregate consumption of these opposite trends would have been different.

Because of the multiplicity of uses of alcohol and of patterns of drinking, it may be misleading to treat aggregate consumption of alcohol as a unified variable. It would be preposterous, indeed, to expect traditions of wine-drinking at meals and recreational drinking to respond in an identical manner to changes in prices or social structure. Nevertheless, changes in demographic and occupational structure undoubtedly had an important bearing on drinking practices over the study period. Although there are variations from one society to another, the period 1950-1975 was marked by similar changes in the demographic and occupational structure of all the societies studied. The agricultural population decreased, and there were increases in the number of people employed in the tertiary sector — in service, commerce, and professional occupations. This change was associated with a high level of employment particularly in the 1960s when the most dramatic increases in alcohol consumption occurred. A large number of women entered the labour force.

In countries such as Finland and the United States, where urban alcohol consumption was traditionally much higher than rural consumption, migrants to urban areas appeared eventually to adopt more urban drinking styles (Cahalan and Room, 1974:88; Mäkelä and Österberg, 1976). This was presumably not an important factor in Poland, where rural drinking was, if anything, slightly heavier than urban drinking (Świecicki, 1963). International migration appears to have affected consumption in Switzerland and Ontario, where heavy migration from wine-drinking cultures not only added a new, high consumption group to the population, but also introduced the native population to new drinking styles. High employment rates among women were associated with greater independence, and a fall in abstinence was often associated with increased drinking among women.

The influences of these demographic and occupational changes were mostly indirect and mediated by changes in the cultural climate and collective understanding of the meanings of drink. In Finland, for example, the younger generation came to drink more not only because its demographic composition was different from that of its parents, but also, it was internally very homogeneous in its drinking behaviour, independently of differences in sex, residence, and occupation (Sulkunen, 1979).

Changes in the levels and patterns of alcohol consumption in the period 1950–1975 may perhaps best be viewed as a part of the broad changes in lifestyles, cultural patterns, and organization of leisure which occurred, to a greater or lesser extent, in all the societies studied. Historically, alcoholic beverages have been considered in many societies as a consumer product, the distribution and availability of which should not be left solely to the operation of market forces. In parts of Europe and in North America, the changes in the view of alcohol that accompanied the 19th century temperance movement made it an especially disreputable commodity, thereby reducing actual consumption and even more dramatically reducing the social acceptability of drinking (Warriner, 1958; Gusfield, 1968). Even where the temperance movement was not strong, consumption patterns often changed their nature. In particular, in an era of industrialization and the establishment of a new working discipline, drinking at the work place (Stivers, 1976) was discouraged. Drinking was secluded from work and became a leisure activity, and indeed even a symbol of leisure (Cavan, 1966). This trend was most marked among industrial workers and the working class generally, these being special targets of temperance rhetoric in many places (Vogt, 1981).

In Northern European and English-speaking countries, then, drinking became associated particularly with leisure and particularly with activities by males outside the home. Drinking often became a "situation-marker" symbolizing the shift from work to leisure, from the serious to the playful, from the reputable to the slightly disreputable.

Two general trends in the nature of leisure can be discerned in the post-war period. One is the commercializing of leisure: activities which were largely outside the cash economy — outdoor recreation, sporting activities, etc. — became industrialized and commercialized on a large scale, both in terms of the production of commodities used in the activities and in terms of services for those interested in the activities. The other trend is toward the privacy of leisure: activities which had been undertakings of larger social groups in a more public arena became functions of the nuclear family.

In the last 30 years, the disreputability of alcohol has dwindled, and drinking is now accepted in a much wider repertoire of situations than before. The position of alcohol as a special commodity and of drinking as a compartmentalized activity has been undermined, and alcoholic beverages now rank in more or less the same category as any other item of leisure equipment. In the next section, we turn to a discussion of the manifestations of these changes in alcohol production and trade.

ALCOHOL PRODUCTION AND TRADE

Economic Significance of Alcoholic Beverages

A variety of measures can be used to gauge the significance of the alcohol industry in an economy. In this section, we discuss the value of alcohol production, the percentage of the labour force employed in the alcohol sector, international trade in alcoholic beverages, the proportion of total tax revenue obtained from taxation of alcohol, and, finally, the importance of personal expenditure on alcohol.

In all of the case studies, while the absolute value of alcohol production is considerable, its significance is minor, and in most cases declining, relative to national aggregates. By the end of the study period, the gross value of the output of the alcoholic beverages industries was approximately 1% of total industrial output in Finland, Poland, and Switzerland (Kasurinen, 1980; Cahannes, 1981; Moskalewicz, 1981), while in Ireland, with its large export trade in beer, it reached 6% (Quarterly Industrial Inquiry).

The number of persons directly employed in the production of alcoholic beverages is similarly small relative to national aggregates. In all of the case studies, less than 1% of the total labour force is employed in the production of alcohol. Locally, however, alcohol-related employment may be of considerable importance, and in Switzerland 7% of the agricultural labour force are employed in viticulture (Cahannes, 1981). Due to increases in alcohol consumption, the number of workers employed in producing alcoholic beverages in relation to the total industrial labour force increased temporarily in Finland (Mäkelä et al., 1981). In general, how-

ever, increases in labour productivity resulted in a marked tendency for the relative importance of employment in alcohol production to decline (Mottl, 1980; Walsh, 1980; Cahannes, 1981).

It is difficult to obtain figures on the impact of the distribution of alcohol on employment, as most often alcoholic beverages are distributed along with other commodities. In Ontario, of the persons engaged in the production and sale of alcohol in 1976, only 8% were production workers. (Gay, 1979). The corresponding figure for Finland in 1978 was 11% (Kasurinen, 1980), and that for Ireland in 1971 was 28% (Walsh, 1980). Thus, more people are employed in the distribution than in the production of alcoholic beverages, and in many countries the number of persons engaged in distribution increased with the expansion of alcohol outlets.

In some cases, the economic interests related to the production of raw materials and other auxiliary industries are considerable. In Ontario, the most important recipients of alcohol revenues (net of governmental taxes and profit) are the corn farmers and grape growers and industries such as packaging and transport. Of the \$601 million received in 1976 in alcohol receipts, more than \$500 million were spent on these related industries (Gay, 1979). In Finland, the number of man-years spent in subsidiary industries equals one-third of the employment in the production and sale of alcoholic beverages (Kasurinen, 1980). In Switzerland, a substantial part of the sizeable fruit crop is used as raw material for distilled beverages (Cahannes, 1981).

Another way of assessing the economic importance of alcohol is through its role in foreign trade. Over the study period, many of the societies experienced an increase in the proportion of consumption accounted for by imported alcohol (Table 2.3). International trade varies in importance among beverages, with beer generally being the least, and wine the most prominent. Many regions are climatically unsuited for wine production and hence the spread of wine drinking has been closely associated with the growth of international trade in wine. Even regions with a domestic wine industry, such as Switzerland, the U.S., and Ontario, have seen imported wines taking larger shares of the market in recent years. On the other hand, Finland, Ireland, and Poland have invested in domestic wines from fruits and berries, and in Ireland, the share of imported wines actually diminished over the study period. Imported spirits accounted for an increasing proportion of spirits consumption in Finland, Ireland, the U.S., and Switzerland but not in Ontario. With the exception of Ireland, the share of imported beer was increasing but was still insignificant at the end of the period. The internationalization of beer-drinking patterns tended to occur more through transnational investments, or brewing under licence, than through increased trade.

TABLE 2.3 *Imports of Alcoholic Beverages in Relation to Consumption, 1950 and 1975*

Imports as % of Consumption	USA		Finland		Ireland		Netherlands		Ontario		Poland		Switzerland	
	1950	1975	1950	1975	1950	1975	1950	1975	1950	1975	1950	1975	1950	1975
Beer	0.2	2.1	0.0	0.3	0.7	0.5	0.0	3.5	0.4	3.9	0.6	0.4	0.3	5.2
Spirits	14.2	46.9	2.0	11.3	20.8	39.0	7.5	16.0	18.2	16.3	0.0	2.1	11.4	26.2
Wine	4.1	13.4	37.3	43.7	100.0	90.3	92.6	94.6	6.1	40.1	6.6	16.0	61.5	67.6

Sources:
United States Brewers Association, Distilled Spirits Council of the United States and Wine Institute (United States); Alkon vuosikirja (Finland); Trade Statistics of Ireland and Annual Reports of the Revenue Commissioners (Ireland); Produktie en Gedistilleerde Dranken, Annual Reports (Netherlands); Liquor Control Board of Ontario, Annual Reports (Ontario); Rocznik Statystyczny Handlu Zagranicznego and Finnish Foundation for Alcohol Studies, 1977 (Poland); Statistiques du commerce extérieur de la Suisse et Régie fédérale des alcools (Switzerland).

TABLE 2.4 *Exports of Alcoholic Beverages Relative to All Exports, 1960-62 and 1975-77*

Average of Years	USA		Finland		Ireland		Netherlands		Canada		Poland		Switzerland	
1960-62	0.03	0.01			4.4		0.61		1.46		0.50 ¹		0.05	
1975-77	0.29	0.11			1.13		0.41		0.72		0.43 ²		0.04	

¹1965
²1975

Sources:
UN Yearbook of International Trade Statistics; Rocznik Statystyczny Handlu Zagranicznego, 1976 (Poland).

The relative importance of alcohol in the export trade of the study societies shows no consistent trend (Table 2.4). It increased slightly in Finland and the U.S., where it was formerly totally insignificant. On the other hand, substantial reductions in the importance of alcohol exports for the trade balance were recorded in Canada and Ireland, where alcoholic beverages used to be an export merchandise of some importance. Despite these reductions in national significance, the Canadian and Irish distilling industries are still heavily dependent on exports. Forty percent of the beer and a third of the distilled spirits produced in Ireland are exported (Trade Statistics of Ireland; Annual Reports of the Revenue Commissioners), and Canada's 1975 exports to the U.S. exceeded domestic sales by 50% (Single et al., 1981).

Another indication of the economic importance of alcohol is its fiscal significance. Excise taxation of alcohol has traditionally been a major source of revenue in several countries. Particularly before the advent of modern income taxation, state finances were heavily dependent on revenue from drink taxes: in the 1880s more than 40% of British exchequer receipts came from excise taxes on alcohol (Harrison, 1971: 346). The relative importance of this source of income has been rapidly declining in most of the societies studied. The growth in consumption has not been enough to compensate for the decline in tax rates on alcohol and particularly for the formidable expansion of the state budget in general. For example, in 1950 alcohol revenue accounted for 7% of federal budget receipts in the U.S. and for 6% of the California state budget, against only 2 and 3%, respectively, in 1975 (Mottl, 1980). In Ireland, the relative importance of excise tax on alcoholic beverages declined from 18% of the total net receipts of the exchequer in 1950 to 13% in 1975 (Walsh, 1980). Finland is an exception in that alcohol revenue fluctuated between 7 and 10% of all state revenue throughout the study period (Mäkelä et al., 1981). Alcohol revenue is still of considerable fiscal significance in Finland, Ireland, and Poland. In California, the Netherlands, Ontario, and Switzerland, alcohol taxes contribute much smaller shares to the total tax revenue.

Despite the growth of disposable income, the percentage of the family budget spent on alcohol increased over the study period in Finland, Ireland, the Netherlands, and Poland (de Lint, 1978; Moskalewicz, 1979; Mäkelä, 1980a; Walsh, 1980). In Switzerland the share of alcohol in total personal expenditure remained stable (Cahannes, 1981), and a decrease is recorded only in California (Mottl, 1980). The share of expenditure on alcohol in total personal consumption expenditure varies greatly from case to case. In 1975, it ranged from 3% in California (Mottl, 1980) to 8% in Finland (Mäkelä, 1980a), and 13% in Ireland and Poland (Moskalewicz, 1979; Walsh, 1980).

Structure of the Industry

There has been a strong trend towards concentration in the production of alcoholic beverages. This is most dramatic in the brewing industry, which has emerged from a small-scale local activity with significant regional variation into a capital-intensive industry, controlled at national or even international levels, that markets a product that is increasingly uniform.

In the Netherlands, where one company (Heineken) now accounts for more than half the domestic beer sales, a "traditional home activity, brewing, has become a large scale industry, the operating area of which is not restricted to national boundaries" (Commission of the European Communities, 1976). In Ontario, the number of breweries diminished from more than 30 in 1950 to only 11 in 1975, and three brewing companies control over 95% of the market (Single et al., 1981). In Ireland, the Guinness group accounts for more than 90% of total sales and there are only two other brewing companies (National Prices Commission, 1979). In Switzerland, the number of breweries had already shrunk by the early years of this century, but the trend towards concentration has continued, so that now only 27 independent breweries remain, compared with more than 400 a century ago (Cahannes, 1981). In Finland, brewing is in private hands but in 1950 the trade was tightly regulated by a system of local monopolies. Gradually all breweries were given free access to the entire national market, which accelerated the process of concentration. Of the 16 independent brewing companies in operation in 1950, only seven had survived to 1975 (Österberg, 1974). In Poland, there was a similar decline in the number of production units (Moskalewicz, 1979).

Concentration of the brewing industry cannot be ascribed to the relatively small size of the markets in countries such as Ireland, the Netherlands, or Switzerland. Federal Trade Commission data for the United States reveal a dramatic increase in the dominance of the eight largest brewers, especially during the 1960s, to the point where they now account for 83% of total sales compared with less than 20% before World War II. A single brewer — Anheuser Busch — now accounts for almost a quarter of the vast U.S. market.

The brewing industry has also been characterized by considerable transnational investments in subsidiary companies, and brewing international brands under licence has become a common practice.

These trends indicate significant economies of scale in brewing. Technological improvements — e.g. a longer shelf life — have increased opportunities for market expansion. Improved transportation and communications have reduced barriers to distant markets. However, the impetus to concentrate by both the beer and spirits industries stems not only from technical economies of scale but also from financial considerations

requiring the spread of risks over a variety of brands of alcoholic beverages and a diversification into other sectors of the economy. In Ireland, breweries have acquired control of two of the largest soft drink manufacturers which, in effect, allows them to participate in the profits arising from the growth of "white spirits" (gin and vodka) sales. Indeed, brewing companies may themselves be purchased by large international conglomerates seeking to diversify investments. Control of all three of the major Canadian brewing concerns (Labatt's, Molsons, and Carling O'Keefe) have been acquired by multinational corporations (Single et al., 1981), and in the U.S. such multinational food marketers as Pillsbury and Nestlé bought themselves into the alcohol sector (Bunce, 1980).

The structure of the spirits-producing industry varies among countries but the available studies generally indicate a high and increasing level of concentration. In most countries in western Europe and North America, the production of spirits is dominated by as few as three conglomerates producing a very large variety of products, under an even larger number of brand names (for example, Distillers Co. Ltd. markets blended Scotch whisky under such names as Johnnie Walker, Haig, VAT 69, White Horse, Black and White, Dewars). Although there are 34 different firms which supply domestic spirits to the Ontario market, 29 firms and 90% of the market are controlled by six multinational corporations (Gay, 1979). Typically the big conglomerates allow each product, and even brand, considerable operating independence with separate marketing budgets which are used to promote the brand rather than the product. It is also characteristic of these companies that they have diversified internationally, mainly by acquiring local distribution facilities, but also by acquiring foreign distilleries and bottling plants, and interests in local retail outlets (Gay, 1979; Bunce et al., 1981).

In Poland and Finland, the production and distribution of distilled spirits are in the hands of a state monopoly, with a few private producers of liqueur having a residual share of the market in Finland (Moskalewicz, 1981; Mäkelä et al., 1981). In Switzerland, non-commercial distillation of spirits is still of considerable importance. The number of licence holders for spirits distillation was still as high as 170,000 in 1975, despite a 17% decline since 1950 (Cahannes, 1981).

In contrast to the trend towards internationalization in the spirits and beer-producing industries, the production of wine has retained much of its local character. Three wine-producing areas are included in the case studies — California, Ontario, and Switzerland. In Switzerland, wine-producing estates declined by one-half from 1955 to 1975 despite the growth in viticulture acreage, but the average size of the vineyards has remained very small and viticulture is still a family business. The production costs of Swiss wine clearly surpass those of the surrounding viticultural countries (Cahannes, 1981).

The California and Ontario situations are very different from the Swiss. There are enormous opportunities for growth in the huge North American market where wine drinking at the end of the study period accounted for only about 10% of total alcohol consumption. In both California and Ontario, the local wine industry, whose products were formerly of low quality and had a poor public image, was being transformed with government assistance into a large-scale industry with improving standards. In California, a family image of production has been used to promote wine drinking, but the industry is, in fact, highly concentrated (Bunce et al., 1981). In Ontario, it is doubtful whether the wine industry would survive without the protectionist policies of the provincial government, which is committed to maintaining the Niagara Peninsula as a grape-growing region (Single et al., 1981).

Not only was there a trend towards concentration in the production of spirits, wines, and beer over the study period, but the boundaries between the wine and spirits industries, in particular, became blurred. In the U.S., Seagram, Heublein, and National Chemical and Distillers led a move to buy out wine firms, followed closely by brewers such as Schlitz and Labatt's (Bunce, 1980). In Ontario, two of the largest wineries are owned by brewing companies (Single et al., 1981).

The concentration of beer and spirits production was also closely associated with marketing trends. A major advantage of bigness per se is in marketing, specifically with regard to the economies of scale in advertising and distribution. Oligopolistic industries such as brewing and distilling rely heavily on label diversification and advertising to discourage would-be entrants to the market. The cost of launching a new brand is so high that potential backers are sceptical of an entrepreneur successfully trying to set up in these industries. In the United States, alcohol beverage industries rank among the major advertisers (Mottl, 1980). In the Netherlands in 1975, alcoholic beverages accounted for 5% of all advertising expenditures on radio and television and in newspaper (Centraal Bureau voor Courantpubliciteit, 1975).

The size of producers also facilitates vertical integration. In the Netherlands, the largest distiller (Bols) and the largest brewer (Heineken) have consolidated their oligopolist position by mergers/takeovers of smaller companies with established brands and have acquired alcohol manufacturers to ensure raw materials supply and retail outlets to ensure control of distribution. Recently (1980) they were negotiating a merger into one giant company. Six of the largest British brewing companies owned 56% of all pubs and 13% of all off-licences in the U.K. in 1975 (Commission of the European Communities, 1978, Table 2).

The alcoholic beverage industry has also become connected with the catering/leisure industry. An example of these complex interrelationships is the acquisition in 1972 of the Watney Mann brewery by Grand

Metropolitan Hotels Ltd., a conglomerate with assets in hotels, entertainment, catering, milk and food processing, brewing, wines and spirits, and betting and gaming. In California, tied house laws prohibit vertical integration within the alcohol industry and maintain a strict three-tier structure (producer, wholesaler, and retailer). The pressure towards integration was strong enough, however, to bring about a series of special interest exceptions, beginning in the late 1950s, which undermined the three-tier structure (Bunce et al., 1981).

Structure of the Retail Network

During the study period, the structure of retail trade changed drastically. The number of independent shops fell substantially, the range of goods expanded, the average turnover and sales area of the stores increased, and the practice of self-service was widely adopted. Legislative changes were often necessary to allow for these changes, since in many of the study societies regulations prevented the formation of chains and limited the kind of articles sold by different shops.

Where off-licence retail of alcoholic beverages throughout the period was subject to few special restrictions, changes in the distribution network for alcohol were reflections of general changes in the retail trade. In Switzerland, off-licence sales of alcoholic beverages are part of the distribution of foodstuffs, and the number of shops selling alcohol actually diminished as supermarkets and chains of self-service stores superseded traditional family businesses (Cahannes and Müller, 1981c). Elsewhere, legislation had to be revised to follow market trends. In California, changes in regulations made alcohol licences readily available to a variety of businesses — e.g. supermarkets, sports arenas, and fast food markets (Bunce et al., 1981). In Finland, a change in legislation in 1969 allowed for medium beer being sold in grocery stores (Mäkelä et al., 1981).

In the Netherlands, there are two kinds of retailers: those licensed to sell all beverages and those who sell beer and wine without a licence. Until 1972, the number of licensed retailers increased, a result of growing sales and abolition of the maximum rule which made it possible for local authorities to control the number of off-licence outlets depending on the population. Since 1972, the number of licensed retailers decreased as the result of concentration and rationalization. Firms licensed to have multiple shops are rapidly expanding their activities and the unlicensed sector is taking over beer and wine retail sales (Commission of the European Communities, 1976: 45-48, 97).

The diversification of on-licence outlets has already been described. Here, too, there was a marked tendency towards concentration and chain formation. At the same time, the distribution of alcoholic beverages merged into the general catering, travel, and leisure industries.

Diversification of Economic Interests Related to Alcoholic Beverages

The alcohol sector is generally substantial in absolute terms but minor and, in most cases, decreasing in relation to national aggregates. This is true for employment, output, imports or exports, and tax revenue in the alcohol industry. The main exceptions are the importance of beer and spirits exports from Ireland, and the still relatively large share of alcohol taxes in total tax revenue in Ireland, Finland, and Poland. The alcohol industry may, however, be of great importance in pockets within individual countries, as, for example, in the wine-growing cantons of Switzerland. The local significance of the alcohol industry is often accentuated by political processes. In Switzerland, viticulture is concentrated in the Franco-phone cantons. As a consequence, measures having an adverse impact on grape-growing are easily interpreted as attacks by the German Swiss majority on the Francophone minority (Cahannes, 1981).

Moreover, when unemployment is a serious problem, any industry providing stable employment at high wages, as has been the case with brewing and distilling in Ireland, is regarded as an important asset. It should also be noted that service industries are relatively labour intensive. As the distribution of alcoholic beverages affects the marginal profitability of a number of such industries, its full economic significance cannot be gauged from its small share in the main economic aggregates. More generally, to those whose livelihood is derived from producing, importing, or selling alcohol, it is of vital importance, and they tend to resist any new attempt to restrict or regulate trade.

Therefore, more important than quantitative changes over the study period in the contribution of the alcohol sector to national aggregates are the processes by which alcoholic beverages began to have a bearing on more and more multifarious interests and to affect, at least marginally, the economic conditions of increasingly numerous population groups.

In many of the study societies, retail trade has been struggling with the severe difficulties caused by the growth of supermarkets and by population redistribution. The number of stores has been rapidly declining. In Finland, medium beer accounts for only a small portion of the total turnover in retail trade, but it may affect the profitability of marginal neighbourhood stores. It is revealing to note that the sales commission on medium beer has been increased to subsidize the increased wage cost to the retail trade (Mäkelä et al., 1981).

From the perspective of Finnish agriculture in general, the malting barley and fruits and berries used by the alcohol industry are of minor importance. Nevertheless, alcohol production affects the livelihood of some specialized farmers, whose interests are articulated by the Central Organization of Agricultural Producers (Mäkelä et al., 1981).

Drinking has also become an intrinsic component — often the most profitable component — of many leisure industries: spectator sporting events, ski and hunting lodges, charter air vacations, etc. Not only has alcohol intermingled with more and more activities, but new types of organizations and groups also have become engaged in the alcohol trade. For example, Ontario experienced a marked increase in social, fraternal, labour, and veterans' clubs licensed to sell alcohol, which undoubtedly had a bearing on the political position of the trade. Similarly, the growing significance of licensed restaurants for the economy of cooperative enterprises in Finland may have had political implications, as the two main cooperative groups have close ties with either the Center Party or labour parties (Mäkelä et al., 1981).

In our discussion of the economic structure and significance of the alcohol beverage industries, we have alluded to the possible impact on consumption of the industry's policies — e.g. changes in marketing practices. However, our main interest has been in looking at consumption and production as two aspects of the same phenomenon, namely, the changing position of alcohol in our societies. In our analysis of consumption trends we concluded that alcohol has become integrated with other social activities. In parallel with this, the status of alcohol as a special commodity, set apart from other commodities, has been lowered, and alcohol production and trade have merged with that of other goods. Although its economic significance may not be great, the number of people with at least a marginal interest in the production or trade of alcohol has multiplied. The "normalization" of alcohol as a consumer good and an economic commodity has had an important bearing on alcohol control.

3. Alcohol-Related Problems

ALCOHOL PROBLEMS STATISTICS AND THEIR MEANING

Societies differ in what they regard as social problems and in the extent to which they attribute the problems to alcohol consumption. And societies change over time in terms of their readiness to attribute problems to drinking. During the 19th century, for example, many Americans perceived alcohol as one of the chief causes of crime, poverty, premature mortality, and labour unrest. Conversely, in the 1940s the United States experienced an opposite tendency, when reputable authorities denied a major role for alcohol in liver disease or road accidents.

Important national differences also exist in the division of labour among the authorities concerned with the management of alcohol problems. Alcohol-related problems may be handled by the police, penal institutions, social authorities, or medical authorities. Countries vary, not only in the finer details of their recording systems, but also in their overall conceptualization of the societal consequences of drinking. Mäkelä and Viikari (1977) argue that, in modern societies, three principal ways of formulating "the social liquor question" can be distinguished: as a question of public order and security; as a problem of productivity; or as a question of public health.

These cultural conceptualizations have an influence both on the experiences of individual drinkers and on official statistics on the consequences of drinking. If alcohol is viewed as a problem of public order and security, the main responsibility for alcohol control falls upon the police and social authorities. If alcohol is treated as a problem of productivity, strict labour discipline is maintained, industrial alcoholism programmes are launched, and the marginal alcoholic section of the population is relegated to skid row. A public health approach assigns responsibility for the injurious effects of drink to public health authorities. Correspondingly, individual drinkers become registered as public nuisances, for their poor performance at work, or as patients.

In principle, then, if we wish to compare the nature and extent of alcohol-related problems across societies or even across time in a given society, we would like to have measures on two different dimensions. We would need measures of alcohol's role in problematic events or situations and measures of the cultural dimension to the definition of problems and their attribution to alcohol.

What we actually have available falls very far short of this. Concretely, the available time series come from four health and social statistical systems: mortality statistics, hospitalization statistics (particularly for mental hospitals), statistics on arrests and convictions for public drunkenness, and road accident statistics. These statistical series reflect differing mixtures of "objective" reality and social definition and attribution. Although mortality itself is defined easily enough, the attribution of death to an alcohol-related cause is subject to cultural factors. Accident statistics reflect the joint operation of "objective" reality and imputation to alcohol, and may in addition reflect variations in the social definition of the event itself. Arrest and hospitalization reports are mainly records of the response of social agencies. The numerous factors which determine the nature of these statistical series will change over time and across societies as, for example, police attention is turned in new directions or as the structure of mental health care is changed. In California, for example, a policy decision to close mental hospitals resulted in a drop in the number of reported alcohol psychoses — a reflection of political rather than medical events (Bunce et al., 1981). Thus, our available measures are severely limited as a vehicle for describing and comparing actual alcohol problems in the seven study societies.

Administrative statistics on control undertakings, however, are of interest in their own right, whether or not they accurately reflect the objective consequences of drinking. In some instances, control measures constitute the most important consequences of drinking both from the point of view of the individual in question and of society as a whole. Thus, changes in problem statistics may reflect both changes in the social and health systems responding to these problems and changes in social awareness of the problems. In addition, alcohol problem statistics provide an indication of trends in the drinking patterns related to the problems.

Throughout this chapter, then, we will be examining the available statistics on alcohol problems from three perspectives: as indicators of actual changes in the alcohol problems of a society; as indicators of changes in the social and health systems' response to those problems; and, in an extension of the analysis of the previous chapter, as indicators of trends in the drinking practices of the seven societies concerned.

In focusing on alcohol problems from a social and health perspective, we are setting aside discussions both of the benefits of drinking and of the economic aspects. Alcohol gives rise to pleasure as well as problems, and moderate drinking may even carry health benefits, for instance in relation to heart disease (LaPorte et al., 1980; see also Ashley and Rankin, 1980). But we have no measures of trends in these positive aspects, except insofar as consumption trends may be regarded as an expression of consumers' *de facto* choices about benefits and pleasures. With respect to economic costs, data are also unavailable for an analysis of trends, but we

would argue anyway that the assumptions involved in such analyses are questionable (Mäkelä & Österberg, 1979), and that such analyses are a distraction from charting trends in health and social problems per se.

In the alcohol literature, alcohol-related problems statistics are by tradition viewed as separate indicators of a single underlying phenomenon — alcoholism. Indicators of drinking problems do indeed tend to concentrate in a fairly small group of heavy drinkers or alcoholics. For example, the share of labelled alcoholics in drunk driving is substantial (Aarvala, 1968; Waller, 1968; van Oyen, 1972; Cameron, 1977), a relatively small group of persons account for a very large number of arrests for drunkenness (Säilä, 1972; Oki et al., 1976), and the share of known alcoholics in unauthorized non-attendance at work is remarkably high (Obrebska, 1968; Siipola, 1969).

Concluding that this phenomenon warrants a single analysis of alcoholism and alcoholics, however, is problematic in several respects. First, there is no consensus as to what is exactly meant by "alcoholism." Jellinek's classical description of the alcoholic involved a progressive development of well-defined phases and symptoms (Jellinek, 1947), a conceptualization based primarily on populations of clinical alcoholics in the United States. As several authors (e.g. Room, 1977) have pointed out, there has been considerable evidence since the time of Jellinek's formulation to indicate that the extent and nature of alcohol-related problems in general populations are quite different from those found among clinical alcoholics. The majority of clinical alcoholics are well past 30 in age, whereas in general population surveys it is young men under the age of 30 who consistently score the highest on various indexes of problem drinking (Room, 1977).

Second, there are many methods for determining the prevalence of alcoholism, however defined. Researchers have measured prevalence with treatment and control data, survey techniques, consumption data derived from aggregate sales or tax records, and from data on alcohol-related mortality (for a review, see Single, 1981). The magnitude of prevalence estimates arrived at by each of these methods depends heavily on more or less arbitrary decisions on the cut-off point between normal and heavy, or problematic, consumption. More importantly, various estimates often lead to divergent conclusions when countries or regions are compared with each other. Single (1979) examined four alternative indicators of alcoholism prevalence in the various regions of Ontario. He found that in most of the regions, the four estimates were in reasonable agreement. However, there were some notable exceptions. In Toronto, the estimate based on alcoholism mortality was exceptionally high. Death from alcoholism is associated with very heavy use over a relatively short period of time, a pattern particularly prevalent among skid row inebriates, who tend to congregate in major metropolitan areas. On the other hand, the esti-

mate based on cirrhosis mortality was quite low in the northern regions of the province. This may well reflect the demographic composition of these remote areas. Many residents are young workers attracted to the region by high wages, and fatal cirrhosis typically develops over a long period of time.

Walsh and Walsh (1973) have similarly shown that, in international comparisons, the picture one obtains of the severity of alcoholism as a problem in Ireland varies greatly according to whether the comparisons are based on cirrhosis mortality, admission rates to hospitals for alcoholism, or convictions for drunkenness. They conclude that "an apparently severe problem of alcoholism can exist even when the average consumption of alcohol and the death rate from cirrhosis are very low."

Finally, as may be seen in a recent survey of drinking practices among U.S. Air Force employees (Polich and Orvis, 1979), drinking problems among young men are not confined to a clearly demarcated subgroup of heavy drinkers. In this study, only a minority of the population reporting problems was recruited from among the heaviest drinkers, and of all persons having experienced two or more serious incidents, more than 50% had a daily consumption below two ounces of pure ethanol. So many more people are in the lower consumption categories that, although members of this group have a low risk for problems, the absolute number reporting serious incidents is larger than in the tiny group of the heaviest drinkers (National Academy of Sciences, 1981).

Alternative prevalence estimates of alcoholism thus yield divergent rankings among societies, and the same is true for comparisons over time (Lassenius, 1974). In addition, a large number of persons who experience alcohol problems are not within the "alcoholic" population. These divergencies are reflections of cultural and temporal variation in the mixture of alcohol problems, as alternative estimates are differentially influenced by prevailing patterns of drinking and of social response to drinking problems. Given that no single indicator can reliably estimate the magnitude of alcohol problems in all countries, we shall not present estimates of the prevalence of alcoholism. Rather, the report will focus upon specific alcohol-related problems.

CULTURAL VARIATION IN THE MIXTURE OF ALCOHOL PROBLEMS

At the beginning of the study period, the aggregate consumption in all seven study societies was on a low or moderate level. Somatic health ailments related to prolonged drinking were correspondingly not very salient, with the possible exception of Switzerland and California. There were substantial differences in the ratio of cirrhosis mortality to the total

consumption of alcohol, and even more striking cultural differences in the rates and nature of social conflicts related to drinking.

Both in Poland and in Finland, the level of overall consumption was very low, consisting predominantly of distilled spirits. Indicators of the consequences of prolonged drinking were correspondingly low, but social conflicts related to drinking were common. Both countries had high rates of arrests for drunkenness, and crimes of violence were closely related to drinking. Poland and Finland also had a high rate of fatal alcohol poisoning, further evidencing their unrestrained patterns of drinking. Conflict-prone drunken comportment was not confined to isolated subgroups of inebriates but was a more or less integrated part of the drinking habits culturally prevailing over the general population. Evidence of cultural acceptance of drunkenness is readily found in a number of Finnish and Polish studies. Thirty percent of a representative sample of the Polish population thought that half a litre of vodka was the appropriate amount to reserve for each male guest at a Saturday party, and an additional 35% wanted to reserve at least a quarter of a litre (Janik, 1976). A sizeable minority of a sample of residents in Helsinki preferred occasional unrestrained drinking to regular restrained drinking as a normative pattern (Allardt, 1957).

In the Netherlands, the level and beverage structure of consumption was very similar to those of Finland and Poland, but there were few signs of disruptive drinking. Nor had the relatively homogeneous and tightly integrated Dutch culture produced any significant numbers of public inebriates. The temperance ethos that apparently permeated the Netherlands had been successful, not only in curbing the level of consumption but also in checking unrestrained patterns of drinking — which had still been very visible at the turn of the century when the consumption started to decrease. Nevertheless, impressionistic evidence indicates that alcohol continued to be culturally perceived as an important factor in explaining violent behaviour and family disruption.

Public drunkenness was quite conspicuous in California and in Ontario at the beginning of the study period, although to a lesser degree than in Poland and Finland. Arrests for drunkenness were disproportionately confined to a socially visible subgroup of chronic public inebriates (and migrant workers in California), and not dispersed among the general population (San Francisco Committee on Crime, 1971; Oki et al., 1976). However, data on public drunkenness may give a distorted picture of the distribution of conflicts related to single drinking occasions. Survey data indicate that such problems are not uncommon among the general population, especially among young adults (Cahalan and Room, 1974).

Of the societies with a somewhat higher aggregate consumption, Ireland was perhaps the most closely comparable to Finland and Poland. The rate of prosecutions for drunkenness had dropped to a fraction of its historical peak at the turn of the century (Blaney, 1975), and the dominant

pattern was that of convivial beer-drinking at pubs. Nevertheless, disruptive drunken comportment was less confined to deviant subgroups and more an outgrowth of culturally accepted patterns of drinking than it was in Ontario or California.

Of the seven societies, Switzerland had the highest level of aggregate consumption. Despite variations in patterns of drinking among cantons, there were few signs of social conflicts related to disruptive drunken comportment (Cahannes and Müller, 1981c).

A number of cultural idiosyncrasies in problem perception also deserve mention. Californians tend to emphasize drunken driving as the single most important alcohol issue (Bunce et al., 1981). Alcohol as a factor endangering productivity seems to receive more public attention in Poland than in the other societies. In Poland, opinion polls also indicate great concern about family disturbances related to drinking (Janik, 1976). In Ireland, the inroads drinking expenses make on the family budget often receives mention both in public debates and in opinion polls (O'Connor, 1978; Walsh, 1980).

At the beginning of the study period, the division of labour among various public agencies in the management of disruptive drinking varied widely over the seven societies. In Finland, Poland, California, Ontario and, to a lesser degree, in Ireland, arrests for drunkenness were important means of control. In Finland and in the English-speaking societies, gaol sentences (frequently in lieu of unpaid fines) resulted in longer-term isolation of deviant drinkers (Steve Thompson and Associates, 1975; Annis et al., 1976; Mäkelä and Säilä, 1976). In Finland, social authorities used their legal powers to impose mandatory confinement in closed institutions (Bruun, 1970).

Psychiatric institutions played a considerable role in the management of disruptive drinking in Ireland, and to a lesser degree in California and Ontario (Addiction Research Foundation, 1957; Alcoholic Rehabilitation Commission, 1957). In the Netherlands and in Switzerland, where the incidence of disruptive drinking was low, the role of the police was correspondingly small. In Switzerland, cantonal legislation often delegated wide powers to social and health authorities to use repressive measures to control disruptive drinking, and similar stipulations also existed in the Netherlands, but mandatory confinements were relatively rare (Kok, 1977; Tecklenburg, 1981).

This summary description of agencies for the management of alcohol problems overlooks many important details. Although there were national idiosyncrasies in the detailed organizational arrangements, general patterns related to the frequency and nature of social conflicts caused by drunken comportment can still be detected in each of the societies. Where the rate of social conflicts was high, the primary agencies of problem handling tended to be the police and the judicial system. Where there was a low

incidence of such conflicts, the primary agencies tended to be social welfare authorities and psychiatric institutions. Differences in problem mixture were undoubtedly influenced by variations in problem handling, but each society's social control system was also responsive to its peculiar problems.

ALCOHOL-RELATED HEALTH AILMENTS

The most useful information for assessing changes in the extent of health consequences of drinking includes mortality rates from alcoholism, alcoholic psychosis, cirrhosis of the liver, and acute alcohol poisoning, and data on hospital admissions for alcoholism and alcoholic psychosis.

Studies suggest that the ascription of death to alcoholism and alcoholic psychosis depends on varying diagnostic practices (Sundby, 1967; Schmidt and de Lint, 1972; Poikolainen, 1977). Even when data for both these causes of death are combined, mortality rates in each country show unsystematic fluctuations of considerable magnitude. It is therefore of little interest to present exact mortality rates or to calculate percentage changes. Nevertheless, a substantial increase in Finland (Österberg, 1979b) and Ontario (Giesbrecht and McKenzie, 1979) and a less substantial increase in the Netherlands (de Lint, 1981a) is discernible when the average levels of mortality rates of the early 1970s are compared to those prevailing in the early 1950s. In California, the rate was of the same magnitude at the beginning as at the end of the study period (Cameron, 1980). In Poland, the rate was somewhat lower in the 1970s than in the 1950s. Abrupt changes in nomenclature and recording practices make the Polish data particularly unsuitable for comparisons over time (Central Statistical Office, Poland). Deaths attributed to alcohol psychosis are only a small fraction of the combined category in all the study societies except Switzerland, where all but a few of the cases in the combined category are attributed to alcohol psychosis. The decrease in the combined Swiss mortality rate there has thus been interpreted as a result of better treatment of delirium tremens by medication (Müller, 1981).

Finland and Poland are the only countries to record a sufficient number of fatal alcohol poisonings to permit meaningful comparisons in time, and both report a substantial increase in alcohol poisoning mortality over the study period (Österberg, 1979b; Morawski, 1980).

As seen from Table 3.1, cirrhosis mortality was increasing over the study period. The rate of increase varies from one society to another, but not necessarily as a function of the level and rate of growth of aggregate consumption of alcohol. A statistical analysis of the relationship between average alcohol consumption and cirrhosis based only on 25 years and seven populations, however, would be ill-advised since analyses for a

wider and longer experience are readily available. For present purposes, we need to note only that there was an increase in cirrhosis mortality in all the societies included in the study. Bruun et al. (1975) and Skog (1980) provide general and detailed discussions of the relation of average consumption and cirrhosis.

TABLE 3.1

*Cirrhosis Mortality Rates Per 100,000 Population
Aged 25 and Over, 1950-1975*

	1950	1955	1960	1965	1970	1975
California	26.2	29.0	33.3	39.4	40.3	36.3
Finland	3.7	6.1	5.8	6.0	7.4	10.1
Ireland	3.6	4.2	3.4	5.7	6.2	5.7
Netherlands	4.5	5.8	6.4	6.3	7.1	8.0
Ontario	7.7	9.7	12.9	13.9	18.0	22.2
Poland	—	—	6.1	10.9	15.2	18.0
Switzerland	—	21.1	19.2	25.0	25.2	20.4

Sources:

Israelstam & Moreau, 1980; Vital Statistics of the United States, 1950-1976 (California).

California, Finland, and Switzerland provide data to differentiate between alcoholic cirrhosis and total cirrhosis mortality. In each of these cases, the proportion of cirrhosis deaths attributed to alcohol has increased, but this may well reflect changes in recording practices (Cameron, 1979; Österberg, 1979b; Müller, 1981).

In statistics on admissions to hospitals for psychiatric disorders, the category of "alcoholism and alcohol psychosis" is likely to include different types of cases varying from severe organic brain disease to patients admitted to hospital because of socially disruptive drinking. The proportions of different cases vary in different cultural settings. Especially for "alcoholism," there is great variation depending on cultural perceptions and the availability of facilities.

Definite increases in admission rates were noted in Finland (Poikolainen, 1980a), Ireland (Walsh and Walsh, 1981), Ontario (Giesbrecht and McKenzie, 1979) and Poland (Morawski, 1980). A Polish study found a close correlation in time between overall alcohol consumption or consumption of distilled spirits and first admissions for alcohol psychosis (Wald and Jaroszewski, 1978). In some cases, the increases in admissions were dramatic in proportional terms: a threefold increase in Ireland in the period 1965-1975 and a sixfold increase in Poland between 1955 and 1975. The 35-fold increase in Ontario in the period 1950-1975 is

in part a statistical artifact and due to changes in the coverage of the recording system (Schmidt and Smart, 1959). In several societies by the end of the study period, alcoholism was the most common cause of first admissions to psychiatric facilities.

In Switzerland, on the other hand, the admission rate remained more or less stable until 1970, when the comparability of the statistics was interrupted (Müller, 1981). In California, the number of admissions dropped dramatically in the 1970s as treatment in state mental hospitals was replaced by an expanded network of community-based services not included in the mental disorders reporting system (Cameron, 1979).

Data on alcohol-specific diseases give only a partial picture of the impact of drinking on public health. Persons treated for alcoholism commonly experience death rates in excess of the general population, not only from diseases closely related to drinking but also from other causes of death. Causes of death more common among alcoholics than in reference populations include alcoholism, accidents, suicides, liver cirrhosis, peptic ulcer, cancer (especially of the mouth, pharynx, larynx, and esophagus), tuberculosis, pneumonia, and cardiovascular diseases including heart and cerebrovascular disease (Room and Day, 1974; Bruun et al., 1975; Poikolainen, 1980b).

In most of these health ailments, drinking is implicated only in a minority of cases, and trend data on the number of alcohol-related cases are generally not available. Nevertheless, numerous special studies indicate that, for example, alcohol-related traffic deaths play a significant role from the perspective of overall public health. In Finland in 1975, alcohol-related traffic fatalities were clearly more frequent than deaths from cirrhosis of the liver induced by drinking (Österberg, 1979b).

In California in 1974, approximate calculations (Cameron, 1979), indicated that alcohol-related cirrhosis mortality and alcohol-related traffic mortality were roughly of the same magnitude as in Finland. Even in Switzerland, with a high cirrhosis mortality, the number of victims killed in alcohol-related road accidents exceeded those who died from liver cirrhosis caused by alcohol by more than one-third (Müller, 1981). In terms of years of life lost, alcohol-related road accidents are even more important, because of the relatively young age of traffic deaths.

There have been few attempts to assess systematically the overall impact of drinking on public health, either in terms of the share of alcohol-related causes in overall mortality or in terms of the proportion of health services for alcohol-related conditions.

Ouellet et al. (1979) estimated the number of deaths attributable to alcohol in every alcohol-related cause of death category and then added these deaths together. Of deaths in Canada in 1974, 6% were attributed to the hazardous use of alcohol. It was also estimated that about 10% of the potential years of life between the ages 1-70 were lost because of prema-

ture mortality attributed to alcohol. In these estimates, neither interactions between drinking and smoking nor the possible preventive effects of alcohol (LaPorte et al., 1980) were taken into account.

In a study of a random sample of all days in hospital and out-patient visits to hospital clinics and to medical doctors in Finland in 1972, Salaspuro (1978) estimated that, depending on the criteria used, between 4.6 and 5.3% of days in hospital, between 3.7 and 4.5% of out-patient visits to hospital clinics, and about 1% of visits to doctors could be identified as alcohol-related.

Aside from quantitative variation in overall mortality and morbidity related to alcohol use, there are also important cultural differences in patterns of mortality and morbidity. In Finland and Poland, acute alcohol poisoning has been at least as big a killer as liver cirrhosis (Mäkelä et al., 1981; Morawski, 1980). In Finland, other forms of violent death related to drinking may also have greater impact on life expectancy than chronic diseases caused by prolonged drinking (Poikolainen, 1979). Even in cultures with less extreme patterns of drinking, a renewed interest in the role of prolonged drinking in the etiology of a number of somatic diseases should not make us forget the public health impact of consequences related to single drinking occasions.

The overall picture of trends in alcohol-related health ailments in the period 1950–1975 is of a substantial increase for most indicators in most of the societies studied. The most complete data are those available for cirrhosis mortality, and here the increase has been substantial for all the study societies except Switzerland. The widest diversity in trends occurred for mental health system admissions for alcoholism and alcoholic psychosis, but this diversity partly reflects the system's greater sensitivity to changes in the cultural definition of problems and in the tendency to attribute them to alcohol.

The study societies differed characteristically in their mixture of health problems related to drinking, and there was little sign of convergence in the study period. The societies with a historic pattern of extreme drinking events and associated consequences — notably Finland and Poland, where substantial alcohol poisoning fatalities occur — experienced, in a period of increasing consumption, increases in these event-based consequences, as well as in consequences of long-term drinking patterns (such as cirrhosis). On the other hand, Switzerland, which had a relatively high consumption level at the beginning of the study period and a drinking culture not given to drunkenness, experienced, at most, modest increases in health consequences despite a large increase in consumption.

SOCIAL CONFLICTS RELATED TO DRUNKEN BEHAVIOUR

There are many social conflicts in which alcohol use is implicated — e.g. public drunkenness, fights and quarrels, violent crimes, and family troubles. The statistical series more generally available, however, pertain only to public drunkenness. Those involved in such offences are mainly from lower social strata, and many are from subcultures of chronic public inebriates. However, societies vary in the presence and size of their skid row population. These differences have a bearing on the volume of public drunkenness interventions.

Provisions for Public Drunkenness and the Trend towards Decriminalization

Any interpretation of arrest rates for public drunkenness has to take into account the fact that they are very sensitive to changes in legislation and rule enforcement practices. These changes are also of interest in their own right, as manifestations of shifting perceptions of drunkenness as a social problem.

Throughout the study period, Switzerland had no public drunkenness arrests. A large and growing system of health services for alcohol problems deals with many public inebriates that might be handled in other societies by the police (Müller, 1981).

In Ireland, legislation did not change during the study period. Public drunkenness typically does not lead to police intervention unless it is associated with fights, breaking of shop windows, etc. However, an individual so incapacitated as to be unable to walk or to find his way home would probably be detained overnight. Prosecutions for public drunkenness occur in cases where a nuisance is being caused or where an assault has occurred (Walsh and Walsh, 1981).

Of the remaining societies, Poland was the first to initiate decriminalization (in 1956), when the punishment for public drunkenness was abolished and a network of medical detoxification stations was established. Police retained power to compel the inebriate to go to a militia station or a sobering-up station, both of which are administered by police authorities. "Disturbing public order under the influence of alcohol" also remained a minor offence, and prosecutions for this misdemeanour were common throughout the period. Over the study period, sobering-up stations accounted for an increasing share in the overall number of detentions for drunkenness, and militia stations for a decreasing share. Both statistical series should therefore be studied jointly (Morawski, 1980; Moskalewicz, 1981).

In Finland, drunkenness was decriminalized in 1969, but the police still retained their powers to take public inebriates into custody, and

no new provisions were made for handling persons appearing drunk in public. The main legal change was that the police no longer could fine people for public drunkenness as such, but already under the old legislation only a minority of those arrested were fined. Although the police were expected to apply the same criteria for detention as before, arrest practices, in fact, had already been relaxed prior to the effective date of the new legislation — in fact, as soon as the police learned that public drunkenness was to be decriminalized (Ahlström and Österberg, 1981).

In California, partial decriminalization occurred in 1972. The new legislation provided for detoxification centres to which persons drunk in public could be brought in lieu of arrest. However, except for a few experimental sites, no state fiscal incentive was provided for county governments to establish such facilities, and in most counties they failed to replace the drunk tank. Nevertheless, the official decriminalization symbolized shifts in both official and popular attitudes and sentiments already widespread in the 1960s: the arrest rate had begun to decline several years prior to the change in legislation (Bunce et al., 1981).

Prior to 1970, the usual method for handling public inebriates in Ontario was through arrest, a short trial, and fines. In more than 90% of the cases the offenders were unable to pay the fine and therefore served gaol terms of varying lengths (Annis et al., 1976). Police typically arrested only known homeless inebriates for the offence of public drunkenness, and a substantial proportion of this population had spent a number of years in gaol in a series of short sentences (see Oki et al., 1976). The 1960s involved a change in attitudes and procedures: committees and task forces emphasized the rehabilitative goals of interventions. In 1971, changes in legislation led to partial decriminalization: this allowed for the police to refer inebriates to detoxification centres in lieu of charging them with public drunkenness (Annis, 1979).

In addition to the impact of changes in legislation and long-term changes in enforcement practices, annual arrest rates are influenced by short-term shifts in police activities. To take one example, the general trend of a decrease in detentions at militia stations in Poland contains two anomalies: an abrupt decline between 1965 and 1966, when the number of detentions was cut by 40%, and a similarly abrupt increase between 1970 and 1971 (Morawski, 1980). Analogous but less dramatic shifts in police practices have been reported for Finland and Ontario (Ahlström and Österberg, 1981; Single et al., 1981). Arrest rates thus cannot be studied mechanically, and in the following account, minor fluctuations are disregarded in the interest of a clearer picture of the overriding trends.

Levels of and Trends in Public Drunkenness

There was considerable variation among the societies studied in the rate of official response to public drunkenness around 1960 (Table 3.2).

As already mentioned, public drunkenness is not included as an offence in the Swiss penal code. The Netherlands also had very few recorded cases of public drunkenness. The arrest rate was quite high in California and Poland and reached even higher levels in Finland. The data for Ireland refer to prosecutions, and Ontario statistics report convictions. They are thus not directly comparable to arrest rates. They suggest, however, that the rate of official response to public drunkenness was quite high in Ontario while in Ireland it fell below that of Poland, California, and Ontario.

TABLE 3.2

Rates of Public Drunkenness Per 100,000 Inhabitants Aged 15 and Over in 1960 and 1975

	1960	1975
California ¹	2,390 ²	1,325
Finland ³	4,247	7,485
Ireland ⁴	160 ⁵	220
Netherlands ⁶	90 ⁷	21
Ontario ⁸	1,095	615 ⁹
Poland ¹⁰	1,856	1,646

¹ Adult misdemeanour arrests for public drunkenness (including citations and occasions on which individuals were released without booking)

² Based on an approximate arrest figure

³ Arrests for drunkenness

⁴ Prosecutions for drunkenness

⁵ 1961

⁶ Convictions for public drunkenness

⁷ 1961

⁸ Convictions for public drunkenness (Liquor Act — intoxication, causing disturbance by being drunk; Indian Act — intoxication; and Municipal by-laws — intoxication)

⁹ 1973

¹⁰ Detentions for drunkenness at militia stations or sobering-up stations

Sources:

Cameron, 1979 (California); Österberg, 1979b (Finland); Walsh, 1980 (Ireland); Centraal Bureau voor de Statistiek, Criminale Statistiek (Netherlands); Statistics Canada, Criminal and Other Offences, 1950-1973 (Ontario); Morawski, 1980 (Poland).

During the last years of the period, the growth in alcohol consumption was accompanied by increasing rates of public drunkenness in the three countries — Finland, Ireland, and Poland — where intoxication and conflict-prone drunken comportment are an outgrowth of culturally accepted traditional patterns of drinking. In Finland, the arrest rate decreased in the 1950s, remained fairly stable in the 1960s, but almost dou-

bled from 1969 to 1975 (Österberg, 1979b). In Ireland, the rate of prosecutions for drunkenness remained more or less stable over the period 1961–1972. In 1973, it increased markedly and thereafter remained stable (Walsh, 1980). In Poland, the overall rate of those detained declined between 1959 and 1966, but it again increased by 40% from 1969 to 1975. The rate of prosecutions for “alcohol misdemeanours” (mainly disturbing public order under the influence of alcohol) similarly declined from the early 1950s to the mid-1960s, but increased from 1964 to 1975 (Morawski, 1980). In both these series, however, the level reached by 1975 was below that of the 1950s.

At the other end of the continuum are the Netherlands and Switzerland. Particularly in the Netherlands, the upward trend in alcohol consumption since the 1960s was substantial. However, public drunkenness was not considered a serious problem and the conviction rate was small and declining. Ontario and California fall in-between: public drunkenness rates which were once high declined despite the rise in consumption to a higher level than in Finland, Ireland, and Poland. In Ontario, the rate of public drunkenness and related offences fluctuated around the same level in the 1950s and 1960s and then declined markedly from 1970 to 1973 (Statistics Canada, 1973). The steady decline in public drunkenness arrests in California throughout the 1960s and early 1970s reflects the nationwide movement of sentiment and policy towards decriminalization and, to some extent, the diversion of publicly intoxicated persons to treatment alternatives. Also, while arrests were used as a weapon to reclaim urban territory from skid row inhabitants in the urban renewal programmes of the 1950s and 1960s, this factor diminished in the later 1960s, in part because of successful dispersal and in part because of the decline of renewal programmes (Bunce et al., 1981).

The description of alcohol-related disruption can be complemented by relating arrest rates to the volume of drinking (Table 3.3). In Finland, where the official rate of public drunkenness per volume of alcohol was the highest of the seven societies, a decline is evident over the study period. In Poland, there was a declining trend in the rate of sobering-up detentions relative to consumption, which was temporarily interrupted by upward fluctuations in the early 1970s. Prosecutions for alcohol misdemeanours also declined relative to consumption (Morawski, 1980). The California rate of public drunkenness arrests per unit of consumption declined fairly steadily from 1960 to 1975 (Cameron, 1980). In Ontario, the rate of convictions for drunkenness relative to consumption declined very slowly through the 1950s and 1960s and then dropped markedly in the early 1970s (Statistics Canada, 1973). Rates of public drunkenness thus tended to fall behind consumption. This is particularly evident in California, Ontario, and the Netherlands, but also discernible in Finland, Poland, and Ireland.

TABLE 3.3

Rates of Public Drunkenness Per 10,000 Litres of Absolute Alcohol in 1960 and 1975

	1960	1975
California	25	10
Finland	160	94
Ireland	3 ¹	2
Netherlands	22 ²	2
Ontario	13	6 ³
Poland	33	18

For the content of public drunkenness series, see Table 3.2

¹ 1961

² 1961

³ 1973

Actual changes in drinking styles, occasions, and places, as well as shifts in the perceptions of public drinking or drunkenness seem to have contributed to the depreciation of public drunkenness as a social problem. In some countries, such as Finland, there was more tolerance of drunken behaviour and less social stigma attached to heavy drinking in the 1970s than the 1950s (Mäkelä et al., 1981). In Ontario and California, there seems to have been some dispersal of chronic public inebriates, which probably contributed to a decline in the visibility and perceived importance of the social problem. Impressionistic observations from the Netherlands suggest that while the volume of actual alcohol-related social conflicts, particularly those involving sporting events and protest marches, was increasing towards the end of the study period, both official interventions and media accounts tended to downplay the role of alcohol.

In some of the study societies, decriminalization of public drunkenness led to the establishment of medical substitutes for police drunk tanks. By 1966 in Poland, more drunks were already being attended to at sobering-up stations than in police gaols. The stations, however, are still administered by police authorities. In California and Ontario, at least a proportion of public inebriates are now sent to detoxification centres. In Finland, no new medical facilities were erected, but decriminalization saved a substantial group of drunks from serving their sentences in prison.

Decriminalization of public drunkenness led to fewer prison terms, as it not only reduced the number of public inebriates that were picked up by authorities but also abolished the concomitant gaol terms in lieu of fines. It also frequently entailed better quarters for arrested inebriates. In some cases, however, it had mixed effects from a public health perspective. In Ontario, the decline of gaol sentences was not matched by a comparable increase in time spent voluntarily in detoxification or other

facilities. As a result, public inebriates had more time at large (Single et al., 1981). This may have contributed to the decline in physical health in the chronic drunkenness offender population found in a comparative study involving subjects from the early 1960s and early 1970s (Oki et al., 1978).

DRINKING AND ROAD TRAFFIC

Over the last two decades, alcohol-related traffic problems have been identified as a primary target among social problems linked to drinking. Drinking and driving intervention is in unique contrast to the moves toward decriminalization of public drunkenness and the expansion of non-punitive responses to other alcohol problems. This is evident in general developments in legislation and law enforcement, such as the introduction and expanded use of Breathalyzer equipment, and the implementation of special surveillance and education programmes.

In all the societies studied, it is an offence to drive a motor vehicle when the blood alcohol content exceeds a certain level. Nevertheless, the definition of drunken driving and enforcement practices vary greatly from society to society. Arrests for drunk driving therefore, should not be used as an indicator of the relative seriousness of drunk driving in different countries.

Annual arrest rates in each society are similarly influenced by changes in procedures, legislation, and equipment. California enacted implied consent legislation in 1966, which increased police power to require roadside breath or blood alcohol tests. In addition, law enforcement and traffic agencies in the United States as a whole focused more intensively on the problem of drunk driving in the late 1960s and 1970s than in previous years. In Ireland, Breathalyzer legislation was introduced in 1971, and prosecutions for drunk driving increased by 80%. In 1976, there was a marked decrease as Breathalyzer legislation was hindered by the manipulation of legal loopholes, and in 1978 a more viable law was enacted. The Canadian Breathalyzer legislation which came into force in 1969 made it mandatory to provide a breath sample. At the same time, police officers were trained to identify drinking drivers and encouraged to use drinking driving charges for lesser impairments than in previous years.

Alcohol-related traffic accident rates may also be subjected to changes in recording or investigation practices. In Poland, major changes in the reporting system were introduced in 1975, resulting in a substantial increase in cases recorded as alcohol-related. In most situations, however, accident rates tend to be somewhat less susceptible to changes in administrative policies and can thus be used as a partially independent check on the picture obtained from legal statistics on drunk driving. Variations in recording systems, however, make meaningful comparisons across coun-

tries difficult. Therefore, our main interest here is in the rate of change in alcohol-related road incidents in each society in comparison with other indicators of traffic safety.

In general, alcohol-related road accidents greatly increased between the early 1960s to the mid-1970s (Table 3.4). However, absolute changes are not very informative, because of traffic growth and better safety precautions, which tended to reduce the overall number of accidents

TABLE 3.4

Percentage Changes Between Selected Years in the Number of Drinking and Driving Offences and Fatal or Injury Accidents

			Drinking &	Fatal or Injury Accidents / Drivers
			Driving Offences ¹	Involved in Fatal or Injury Accidents / Persons Killed or Injured in Road Accidents
California	1960-75	+ 549		All cases
				+ 53 (drivers)
Finland	1960-75	+ 320		+ 28 (accidents)
Ireland	1961-75	+ 532		—
Netherlands	1961-75	+ 155		—
Ontario	1960-75	+ 325		+ 185 (drivers)
Poland	1964-74	+ 66		+ 243 (drivers)
Switzerland	1963-75	+ 79		+ 94 (persons)
				- 4 (persons)
				+ 21 (persons)

¹ California: adult misdemeanour arrests for drunk driving

Finland: cases of drunk driving known to the police

Ireland: prosecutions for driving or attempting to drive while drunk or (in 1975) refusal to give a breath/blood/urine sample

Netherlands: driving while intoxicated, causing a fatal or injury accident while intoxicated, (in 1975) driving with a B.A.C. of more than 0.05% or (in 1975) refusal to give a blood sample

Ontario: convictions for (in 1960) driving while intoxicated, driving while ability is impaired, (in 1975) driving with more than 80 milligrams or (in 1975) failure to provide a breath sample

Poland: cases of drunk driving known to police

Switzerland: withdrawals of driving licence because of drunk driving

² See Table 3.5, footnote 1

Sources:

Cameron, 1979 (California); Österberg, 1979b (Finland); Irish Statistical Abstract, 1961-1975 (Ireland); van Ginneken & van der Wal, 1980 (Netherlands); Statistics Canada, Motor Vehicle Traffic, 1960-1975 and Motor Vehicle Traffic Accidents, 1960-1975 (Ontario); Morawski, 1980 (Poland); Müller, 1981 (Switzerland).

in relation to traffic volume. Therefore, the growth rate of alcohol-related accidents may best be compared to the growth rate of all accidents. In four of the five societies for which data are available, there was a faster increase in alcohol-related accidents than in all other types. Despite the continuous traffic growth, the overall number of fatal or injury accidents even levelled off or showed a slight decrease during the last years of the study period, but alcohol-related accidents continued to increase.

Social concern about drunk driving has increased even more than the objective magnitude of drinking as a factor in road safety. With the exception of Poland, arrests or convictions for drunk driving increased more markedly than alcohol-related accidents, particularly from the late 1960s onwards and in conjunction with changes in legislation and rule enforcement.

Table 3.4 thus strongly indicates that the proportion of alcohol-related cases among all accidents was growing in most study societies. Table 3.5 presents more detailed data on the impact of alcohol on road safety by type of accident. With the exception of Poland, alcohol-related cases as a proportion of both fatal and injury accidents have indeed been increasing. Furthermore, their share is greater for the most serious accidents, and this portion also shows the most marked increases. Data from Ontario and California also indicate that the number of impaired drivers has grown faster than the number of drivers who had been drinking but were not judged impaired.

Trends in alcohol-related accidents thus generally run counter to the declining rates for all accidents. While road traffic safety is increasing, alcohol-related road traffic safety is not.

TABLE 3.5

Alcohol-Related Cases in Percent of All Road Accidents by Type of Accident in Selected Years

		Alcohol-Related Cases ¹ in Percent of	
		Non-Fatal Injury Accidents/ Drivers Involved in Injury Accidents / Persons Injured in Accidents	Fatal Accidents / Drivers Involved in Fatal Accidents / Persons Killed in Accidents
California	1960	11.5	20.9
	1975	12.9 (drivers)	33.7 (drivers)
Finland	1960	8.3	13.0
	1975	14.8 (accidents)	23.0 (accidents)

TABLE 3.5
(continued)*Alcohol-Related Cases in Percent of All Road Accidents by Type of Accident in Selected Years*

		Alcohol-Related Cases ¹ in Percent of	
		Non-Fatal Injury Accidents / Drivers Involved in Injury Accidents / Persons Injured in Accidents	Fatal Accidents / Drivers Involved in Fatal Accidents / Persons Killed in Accidents
Ontario	1960	10.0	15.4
	1975	11.8 (drivers)	26.4 (drivers)
Poland	1964	15.5	20.7
	1974	15.0	18.3
	1975 ²	19.4 (persons)	30.0 (persons)
Switzerland	1963	6.4	14.5
	1975	8.0 (persons)	19.2 (persons)

¹ In Ontario, the statistical unit used is that of a driver, classified according to the type of accident involved in and whether he had been drinking before the accident (Giesbrecht & McKenzie, 1979).

In Finland, the statistical unit is the accident, classified in regard to the outcome and according to whether at least one of those involved (including pedestrians) was under the influence of alcohol (Österberg, 1979).

California uses a combined system of reporting. The first unit is the driver, and the classification used is similar to that of Ontario. In addition, accidents are grouped according to outcome and whether at least one of the drivers involved has been drinking (Cameron, 1979).

In Poland and Switzerland, mixed units are used. Switzerland reports the overall number of accidents plus the number of persons suffering injury, fatal or non-fatal, as an outcome of a road accident, distinguishing between alcohol-related and other cases (Müller, 1981). Poland reports separately the number of all accidents involving alcohol, and the number of persons suffering injury, fatal or non-fatal (Morawski, 1980).

The statistical unit used affects the proportion of cases recorded as alcohol-related. Calculating the share attributable to drunk drivers among all drivers involved in accidents produces a more conservative figure than when an accident is classified as alcohol-related when at least one driver (or, as in Finland, even a pedestrian) has been drinking. In addition to these differences in statistical procedure, it is evident that the involvement of drinking is not uniformly reported across societies.

² Data for 1975 are not comparable to earlier years because of major changes in the reporting systems.

Sources:

Cameron, 1979 (California); Österberg, 1979b (Finland); Giesbrecht & McKenzie, 1979 (Ontario); Morawski, 1980 (Poland); Müller, 1981 (Switzerland).

The patterns described above are influenced by at least three factors. More cars and higher traffic density — coupled with a declining rate of accidents — probably increased the visibility of the drunk driver as a social problem. Second, the growing social concern about alcohol-related traffic problems, and the concomitant changes in laws, law enforcement, and recording practices, have emphasized the role of alcohol. Third, the upward trend in alcohol consumption, and particularly the related diversification of drinking patterns and styles, probably contributed to an actual increase in the prevalence of drinking and driving.

In terms of social response, the approach taken towards drunk driving has diverged from that for other alcohol-related social problems. For drunk driving, the overriding trend has been to emphasize general deterrence through criminal penalties and taking away a driver's licence. Of the societies studied, only in California has the tendency to regard drinking problems as medical ones been extended to drunk driving — although not to the same extent as in some other U.S. states. Those accused of driving under the influence in California have a choice, in some circumstances, between mandatory treatment and traditional penal sentences. Nevertheless, like the other study societies, California has adopted blood alcohol limits, mandatory blood-alcohol testing, and increased drunk driving penalties.

Drunk driving is an important exception to the trend towards non-punitive interventions for alcohol problems. More than other consequences of single-drinking occasions, it has also become objectively more significant in the study period. Drunk driving is exceptional, too, in that in most countries it is an extension of more or less accepted drinking patterns. In a larger sense, concern about alcohol and traffic accidents has widened the definition of "problem drinkers," to more than just public inebriates or those under care for alcohol problems. More than for other drinking problems, drunk drivers are perceived as representing all social strata, both sexes, and most adult age groups.

CHANGES IN PROBLEM RATES AND MIXTURE IN RELATION TO TRENDS IN CONSUMPTION

Though alcohol consumption levels rose in every study society in the post-war period, alcohol-related problems showed a more complicated pattern of trends. It is worth setting aside for the moment the effects of changes in public definition and social responses to try and chart the broad trends in problematic events and conditions in the study material. The rise in alcohol consumption was accompanied by increases in the incidence of many health ailments known to be etiologically related to prolonged drinking, although the rate of increase varies from one disease and society to

another. Because of the relatively long incubation period of many such ailments, their significance may be expected to increase in the future even if overall consumption stabilizes at its present level (Skog, 1980). This holds especially for societies which have experienced a rapid increase in consumption starting from a low baseline level.

The evidence in regard to consequences of single-drinking occasions is less conclusive, partly because of insufficient data and partly because of the growing tolerance — manifested in the decriminalization of public drunkenness and more relaxed arrest practices — of certain types of drunken comportment. In many countries, the rate of official response to public drunkenness clearly declined. Despite growing cultural tolerance, however, arrests or prosecutions for drunkenness increased in those countries — Finland, Poland, and Ireland — where conflict-prone drunken behaviour can be interpreted as an outgrowth of culturally accepted behaviour patterns. In Poland and Finland this picture of an increase in the number of heavy drinking occasions is corroborated by an increase in the most extreme outcome of a drinking bout — death from alcohol poisoning.

Even in the societies where conflicts related to drinking have increased in absolute figures, their rate of increase has fallen below the increase in aggregate consumption. This can be seen as an indication of less conflict-prone patterns of drinking behaviour.

Drunk driving is perhaps the only type of behaviour related to single-drinking occasions which steadily gained in importance. The absolute number of alcohol-related road accidents increased in all the study societies. The greatest part of this increase can be traced back to more traffic, and, in some societies, better safety precautions may even have reduced the absolute number of the most serious accidents. With the reduced overall rate of accidents, the proportion of alcohol-related cases of all accidents tended to rise.

The rate of increase of health ailments related to prolonged drinking tends to be higher than the rate of increase of conflicts related to single-drinking occasions. Because of the differential rate of growth of various types of drinking problems, variations across societies in the mixture of problems has tended to diminish. Nevertheless, persistent cultural differences exist. Especially in Finland and Poland, social conflicts related to drunk behaviour are still an extremely important aspect of drinking problems.

Health consequences of single-drinking occasions are similarly quite important in comparison with the health consequences of prolonged drinking. Consequences of single-drinking occasions and of drunk behaviour (accidents, family disturbance) also have health implications that may not be perceived as alcohol-related, often because of the compartmentalization of the system of health and social services.

Along with the shifts in problem mixture, the distribution of problems within the population may have changed. At the end of the study period, drinking problems were less strictly confined to social outcasts and visibly deviant subgroups.

In broad terms the results may be interpreted in the following fashion. As each society has its peculiar drinking habits, the mixture of problems varies accordingly and, in cross-sectional comparisons, there are few positive relationships between consumption level and the incidence of problems closely connected to specific patterns of drinking (Noble, 1979: 20-25). Nevertheless, looking at the historical experience in each cultural setting, the trend in problems characteristic of that culture is not unrelated to temporal variations in aggregate consumption.

Even in a given cultural setting, however, the relationship between consumption level and problems is by no means a simple one. First of all, cultural patterns of drinking and drunk behaviour do change, as indicated by the fact that in all the societies studied the ratio of indicators of social disturbance to aggregate consumption has gone down. In addition, many other factors besides actual drinking behaviours determine the rate and seriousness of alcohol problems. Urban ecology influences the probability that public drunkenness results in social conflicts, medical technology has an impact on the incidence of fatal delirium, the availability and denaturation of non-beverage alcohol has an impact on the rate of fatal alcohol poisonings, and so on.

In particular, during the post-war period, cultural perceptions of alcohol problems changed radically. Alcohol problems tended to be redefined as medical problems. Behaviours that earlier had been looked upon as bad conduct and dealt with by social and legal authorities were redefined as symptoms of an underlying disease which had to be treated. In addition to this, there was a growing awareness of alcohol as an etiological factor in a number of somatic ailments in addition to the classical cases of cirrhosis and pancreatitis. Simultaneously in several societies, the role of drinking as a causal factor in social disturbance began to be seen as less prominent. Whereas at the beginning of the period, in many of the societies studied, it was considered a sufficient explanation for a wide array of disturbances ranging from wife-beating to sports hooliganism, by the 1970s mass media and public discussion have downplayed the role of drinking. Poland and the U.S. are perhaps exceptions to this trend: the public and the media continue to associate alcohol with a wide range of social evils. The 1970s also saw the resurrection of alcohol as an explanation for problems in many of the study societies. In interpreting statistical series on alcohol problems, these shifts in perception should be kept in mind.

CHANGES IN THE SOCIETAL HANDLING OF ALCOHOL PROBLEMS

Among these trends in societal response, the most pervasive was the expansion of service facilities for heavy drinkers organized and financed under a medical rubric. To take one example, in the U.S. there was a 20-fold increase at least from the early 1940s to the mid-1970s in the case-load treated for alcoholism in what may be broadly construed as health institutions (Room, 1980). It should be noted, however, that many of the new services operating under a medical rubric — e.g. halfway houses, detoxification centres — had very little medical content in their services. On the other hand, the meagre services available to chronic inebriates at the start of the study period often came under a health rubric — e.g. treatment at a public general hospital or at a state psychiatric institution.

In many of the study societies, the expansion took the form predominantly of setting up specialized institutions or services for alcohol problems rather than integrating alcohol problem management into the general health care system. In part, this may have reflected a reluctance of the general health care system to provide services for alcohol problems and a lack of match between the services provided in general health care settings and the needs of those with alcohol problems.

Accompanying the expansion was a great proliferation of types of services for alcohol problems. Detoxification facilities, halfway houses, behaviour therapy clinics, drunk driver reeducation programmes, pickup services for drunks, hotlines and referral services, and industrial alcoholism programmes are services which were new or reformulated in the post-war period (Marshman et al., 1978; Päihdeasiain neuvottelukunta, 1978; Bunce et al., 1981; Tecklenburg, 1981). This proliferation proceeded farthest in North America. Under the single general heading of "treating alcoholism" there was, in fact, a considerable differentiation of types of programme for different alcohol-related problems and population categories.

In general, services for alcohol problems shifted away from large inpatient facilities to out-patient services and smaller community-based facilities, reflecting, particularly in the 1960s, a strong trend against the propensity of large public mental hospitals and similar institutions to depersonalize, label, and segregate their patients. As wages for service occupations rose, inpatient treatment also became extraordinarily costly.

In most of the societies studied, there were fewer involuntary commitments to treatment. This does not seem to have been true for Poland but was most dramatically illustrated by the ending of involuntary commitments to mental hospitals in California. Nevertheless, coercion into treatment may have changed less *de facto* than *de jure*: informal court pressure into treatment as an alternative to punishment has grown in California (Mosher, 1981). The decline in involuntary commitments was

associated with the "deinstitutionalization" trend, and also reflected developing notions of civil liberties and patient rights under a health rubric.

Expansion of health services affected the division of labour in the management of alcohol problems among different authorities. The role of the police and of social authorities diminished, while the responsibility of health authorities increased. In Finland in 1960, prisons and police station cells provided 75% of daily provisions of shelter related to alcohol use, with social and mental institutions providing the rest. By 1970, the situation had reversed (Mäkelä & Säilä, 1976). The expansion of health services was usually more important than any contraction of police and social services in this shift in the division of labour.

The timing of the expansion of services for alcohol problems was remarkably similar in the study societies. The first modern wards or clinics specializing in alcoholics were founded in the 1940s or 1950s, but the quantitative expansion occurred in the late 1960s and early 1970s (Singh, 1975; Päihdeasiain neuvottelukunta, 1978; Bunce et al., 1981; Moskalewicz, 1981; Tecklenburg, 1981). The expansion of special health services for alcohol problems coincided with a general wave of investment in public health and social security in most industrial countries.

The expansion has occurred on similar lines, seemingly irrespective of the baseline mixture of alcohol problems in each society. Common solutions were adopted for very different problems. This remarkable consistency in very different cultural circumstances cannot be explained easily. In California and Ontario, the expansion reflected the activities of a well-organized and determined interest group, the alcoholism movement (Room, 1978b). Similar movements in Europe never became important political forces. Certainly, the ideas of the North American alcoholism movement influenced World Health Organization publications on alcohol problems in the 1950s, and North American conceptualizations were published, for instance, in the German-language professional literature (Vogt, unpublished). But such diffusion does not adequately explain the uniformity across countries. Expensive expansions of service systems are not lightly undertaken. Factors inherent in each study society must be found if we are to understand the consistency in solutions.

There are indeed some parallels in the histories of the study societies — parallels which also resulted in the establishment of the alcohol research traditions that were a prerequisite for inclusion in the study. Each had a substantial tradition of popular and often official concern about alcohol problems, expressed in an earlier era by a national temperance movement. Alcohol problems thus had a permanent place on the social agenda, in a way that they do not, for instance, in Italy. As we have argued, in the post-war era each study society showed a considerable propensity to "normalize" alcohol consumption. As we shall discuss in the

next chapter, there was less willingness to exert strict state controls, dating from an earlier era, over alcohol consumption — in part reflecting changes in the general role of the state. In line with this, the locus of alcohol problems tended to be redefined from “the bottle” to “the man”: if alcohol problems were a matter of specific defective individuals, then there was no need to control the drinking of the majority who were not defective. If, indeed, alcohol problems were specific to these individuals, an appropriate means of managing alcohol problems would be to provide treatment for them, and to try to persuade them — but not others — to abstain. In this way, the expansion of the treatment system may be seen as a kind of cultural alibi for the normalization of drinking and relaxation of controls. The study societies had a common need for such an alibi in the light of their historical experience, and the diffusion of professional ideas helped provide one. Once the structure of thought about alcohol had shifted to this frame, subsequent increases in consumption and in associated problems simply became arguments for the further expansion of the treatment system.

4. Alcohol Control Policies

In this chapter we discuss the historical experiences of the seven societies in the development and determinants of alcohol control. As noted in the first chapter, alcohol control refers to the intervention by the state in the production, trade, or purchase of alcoholic beverages — in whatever form or for whatever purpose. Thus, we examine all control systems and actions related to alcohol, and not only those with the explicit aim of preventing alcohol-related problems. Our definition does not, on the other hand, include all state actions regarding alcohol. Policies which deal with the management of alcohol-related problems directly, but which do not intervene in the market for alcoholic beverages, will not be covered here in any detail.

TYPES OF CONTROL SYSTEMS

Historical Background

Before industrialization, the state's interests in alcohol were mainly of a fiscal nature (Mäkelä and Viikari, 1977; cf. Rudé, 1974: 169), although restrictions on the sale of distilled beverages in the interest of public order have been documented for much earlier periods (see e.g., Braudel, 1974: 170-175). Alcohol control policies dealt with alcohol as one taxable commodity among many and had little to do with temperance or prevention of drinking problems.

The temperance ideology was originally one of bourgeois self-discipline (Levine, 1978). Gradually, however, temperance and professional concern about drinking problems became part of the larger social question of working-class poverty and working-class culture. In many countries, heavy drinking by the urban male proletariat was the main target of temperance reformers. In England, concern was expressed by upper and middle class reformers following the breakthrough of industrialism (Harrison, 1971). In the United States, while the early temperance movement was oriented to self-help and reform within the middle class, by the turn of the century there was a strong concern about the effects of drinking on industrial efficiency and discipline in the working class (Gusfield, 1963; Blocker, 1976; Timberlake, 1963). In Switzerland, the temperance movement similarly went through two distinct stages. At the beginning, temperance was a means for the middle class to distinguish itself from the proletariat by self-discipline, and the temperance movement

was strongly influenced by a religious revival advocating a return to strict Calvinist orthodoxy (L'Eglise du Réveil). In the second period, a growing concern for the effects of drinking on the labour force emerged (Tecklenburg, 1981).

Toward the end of the 19th century, political organizations representing the working class joined the temperance forces in many countries (Gordon, 1913: 157-208). In the Netherlands, the Socialist Worker's Party joined the temperance ranks in the early years of the 20th century (de Lint, 1981b). In Finland, the main working-class party became the strongest political advocate of prohibition (Sulkunen, 1981). Therefore, the temperance ideal had support from all of the most important political camps, albeit for different reasons. The original aim of improving the lives of the working class led to an emphasis on preventive considerations in the establishment of the alcohol control systems.

Temperance was not the only justification for alcohol control. The fact that special taxation of alcoholic beverages is the most commonly implemented type of alcohol control demonstrates the importance of fiscal aims. In some countries, taxation is the basis on which it has been necessary to build such auxiliary controls as the obligation to report manufactured or sold quantities, or to accept government inspection over the operations of manufacturers and retailers.

These two aims, temperance and revenue, were common to most alcohol control systems in Europe and in North America. A restraining influence on the design of alcohol restrictions was the consideration given to the illicit trade in alcohol. Concern was expressed that regulations should not be too restrictive if the system were to compete successfully with the illicit market.

In three societies — Finland, Ontario, and California — varying forms of prohibition were adopted after World War I. Following repeal, emphasis was placed on prevention of alcohol problems in the statutes of the various agencies established to exercise alcohol control (Bunce et al., 1981; Mäkelä et al., 1981; Single et al., 1981).

But even in countries which did not adopt any kind of prohibition, serious concern about alcohol problems was expressed by professionals and temperance groups. Such concern influenced the structure and responsibilities of the alcohol control system in Switzerland, for example, where it was first organized by the Act of 1885 and subsequently modified in 1932. These acts established a federal monopoly on distilling; the tasks of the monopoly involved protection of public health, protection of the interests of farmers producing distillable raw materials, and collection of fiscal revenue from alcohol (Zurbrügg, 1976; Cahannes and Müller, 1981c).

In the Netherlands, the temperance movement was quite strong until the 1930s. It aimed at partial prohibition based on a local option, but

failed in this despite intensive political activity. The Dutch alcohol control system was reorganized by the 1931 Alcohol Act (de Lint, 1981).

In Ireland, too, temperance movements have had a long history. Ireland inherited from British rule an alcohol control system in which the licensing powers of local courts play a central role. These powers were changed by governmental acts several times during this century, but, until the 1960s, the court's scope of granting new licences was strictly limited. The stated aim of these limitations was the prevention of drinking problems (Restrictive Practices Commission, 1977). In Ireland, the second most important method of alcohol control, after licensing, is taxation. Thus, Ireland is a good example of a control system in which the most important alcohol control functions are the responsibility of state agencies which do not specialize in alcohol questions: local courts and revenue commissioners.

Despite general similarities in the original intent, the organization of the control systems differed widely, in part because of differences in the role of economic interests in the production of alcoholic beverages. In Finland, the repeal of prohibition necessitated large investments, which helped make extensive state involvement acceptable to the parties of the right. In the French-speaking regions of Switzerland, wine growing constituted an important part of the agriculture. Therefore, the alcohol control system had to be oriented towards regulating the output and demand for these products. The system was a compromise between agricultural interests and temperance forces (Cahannes and Müller, 1981c).

In California, grape growing for table grapes, raisins, and wine grapes to be used in the whole of the United States had developed into a considerable private industry during Prohibition. The repeal of Prohibition raised the hopes of the grape growers to expand into a vital wine industry, and the control system, which was established in the 1930s and rearranged in the early 1950s, was adjusted to these interests (Bunce, 1980).

In Ireland, Ontario, and the Netherlands, the alcoholic beverage industries have historically been important to the economy. Whereas Ontario decided to organize retail through a state monopoly, in all three of these societies restaurants operate on a licensed basis and production of alcoholic beverages lies in private hands (Walsh, 1980; Silcox, 1975; Smits and van Loon, 1964-1979).

In Poland, the control of alcohol production and distribution fell under the scope of the general transformation of the economic and political system after World War II.

Although the economic conditions of production and sale of alcoholic beverages were decisive in regard to the type of control system set up in each society, these systems also reflect differences in drinking patterns and the perceptions of drinking problems characteristic of each society at the time of the creation of the control system. Thus, in Ireland

and California, the focus of control measures is on the restriction of competition at the retail level, especially in the pub or the saloon. In Ontario, Finland, and Poland the control systems are more pervasive and do not focus as much on on-premise retail outlets.

Types of Control Agencies

The alcohol control systems in the seven cases combine three administrative mechanisms: state monopoly, licensing, often with a local option, and the assignment of control functions to agencies not specially established for alcohol control purposes, such as the courts, tax and customs authorities, departments of trade and commerce, and sometimes health and welfare departments.

Four societies have a *state alcohol monopoly*: Finland, Ontario, Poland, and Switzerland. These examples already show that state monopolies can be of a very different nature and can be used in different ways. The Finnish monopoly and the Polish state alcohol agencies produce, import, and sell all but a few alcoholic beverages. In Finland, the monopoly, in fact, buys beer and domestic wine and liqueurs from private companies, and medium beer is retailed through general grocery stores. In Poland, retail of beer and sometimes wine is allowed in grocery stores, and in both countries restaurants operate on licence (Mäkelä et al., 1981; Moskalewicz, 1979). Nevertheless, Poland and Finland represent the most extensive examples of direct state participation in the alcohol economy.

The Liquor Control Board of Ontario (LCBO) is a retail monopoly. It purchases all of the alcoholic beverages it sells, and domestic production is in the hands of private manufacturers. Retail of beer is organized into special outlets operated by a private organization, but the prices of beer are regulated by the LCBO (Single et al., 1981).

Another type of monopoly system is represented by Switzerland, which has a public monopoly on distilled spirits (The Federal Alcohol Administration). The monopoly has granted many of its privileges to private enterprises but it does execute its functions as a public purchase monopoly on the wholesale level. This system aims to stabilize the market and to guarantee a sufficient supply of alcohol to the industry, as well as a sufficient demand for producers of agricultural alcohol at tolerable prices. The Swiss monopoly is oriented towards the fiscal and preventive aspects of alcohol control, although its policies in granting concessions to producers and importers are liberal (Cahannes and Müller, 1981c).

Licensing is another aspect of the control system. In all of the societies studied, the private production and retailing of alcoholic beverages requires a licence. Licensing authorities and licensing practices vary, however. In Finland, Ontario, and Switzerland, the monopolies exercise tight control over producers, and they regulate the types, quality, and

prices of beverages, methods of production, raw materials used, etc. In California, a special agency (Department of Alcohol Beverage Control) has the licensing authority for retail sales, whereas in Ireland and in the Netherlands no such special agencies exist.

In all of the societies studied, the on-premise retail network (restaurants, cafés, pubs, etc.) operates on the basis of licences. These licences are granted by the state alcohol monopoly in Finland, by a special board in Ontario (Liquor Licence Board of Ontario), and by the Department of Alcohol Beverage Control in California. In Ireland, the licensing authorities over all retail outlets are local, but they have fairly strict limits of operation in the licensing legislation (Restrictive Practices Commission, 1977).

Local option, in one form or another, has traditionally been an important way of allowing dry communities to stay dry in a generally drinking society. In all the study areas, the control of production and retail is divided among different levels of government. In Finland, Ireland, the Netherlands, and Poland, local officials have at least some authority to regulate retail practices, although national policies provide overall guidelines.

Three societies — Switzerland, California, and Ontario — have federal systems of government with three tiers of authority: federal, state-province-canton, and local. Alcohol production and advertising are primarily under the control of the federal governments, while retail practices are controlled at the state-provincial-canton level. In California and Ontario, local communities have no formal authority to regulate the alcohol retail market, although they are charged with enforcing the state laws. However, general zoning laws are sometimes used to regulate alcohol retailing (Wittman, 1980; Single et al., 1981). The division of control authority among levels of government can create difficulties and ambiguities, as spheres of authority may be blurred, one tier expecting the other to respond to given issues.

Compared to the early 20th century, the control authority of local communities has generally decreased. This reflects, in part, the loss of power by temperance groups, who traditionally advocated local controls as a means to curtail the alcohol market (see, e.g. Ostrander, 1957). Centralized authority also reflects the tendency of the alcohol markets to expand beyond the local level. Policies concerning alcohol may have significant repercussions on other economic concerns of the state that could not be managed if local communities were permitted to make independent decisions.

Actors outside the specialized alcohol control agencies can be either governmental agencies or private organizations. The most important examples of such actors are those which represent economic interests related to alcohol.

State agricultural policy is the most obvious economic concern to impinge on alcohol control policy from outside the formal control structure, at least in countries with a domestic wine industry. In Switzerland and California, grapes are an important agricultural product, and alcohol control policies regarding wine depend on the overall agricultural priorities set by the governments. In Ontario, a relatively new wine industry is benefiting from government protection and promotion.

Alcohol control is often profoundly influenced by export and import policies. In most but not all cases, these policies are formulated outside the agencies specialized in alcohol control.

The economies of many countries rely heavily on a tourist industry, which in part relies on providing alcohol to its customers. Thus, pressure from tourism interests both inside and outside the government may lead to changes in licensing practices.

Alcoholic beverages may also be an important source of state revenue. This is particularly true in Finland, Ireland, and Poland. Thus, governmental actors concerned with the overall fiscal status of the country usually have a stake in alcohol control decisions. Tax and price decisions are made by the specialized alcohol control agencies only in monopoly systems such as Ontario and Finland, and even in these cases, fiscal considerations may be decisive.

The importance of economic constraints imposed on specialized alcohol control agencies is reflected in their location within government. In Switzerland, Poland, and Ontario (and California until 1954), the agencies responsible for regulating alcohol sales are under explicitly economic departments. The United States federal agency with authority to regulate the alcohol production industry is found in the Department of the Treasury. In Finland, alcohol control is under the Ministry of Social Welfare and Health, but the Ministry of Finance has to be consulted on price decisions.

DEVELOPMENTS IN ALCOHOL CONTROL 1950-1975

Just as the creation of the control system was influenced by a large number of factors other than alcohol consumption or drinking problems, the post-war changes in control policies involved multiple influences. Because the determinants of policy vary considerably in different areas of control — production and external trade, pricing and taxation, distribution, and sales practices — these areas are discussed separately.

Production and External Trade

Most of the control systems established in the early part of this century included some form of control of production in their programme

for the promotion of temperance and collection of public revenue. However, it is in this area that the developments in alcohol control have been most clearly influenced by directly economic considerations.

Alcohol production is still closely linked with the supply of agricultural raw materials. The link between agriculture and the manufacture of alcoholic beverages varies according to beverage type. In the case of wine it is usually very close, since the manufacture of wine usually requires a local supply of wine grapes. The link to agriculture is less close in the spirits industry, which in most cases is not dependent on domestic raw materials (Maurel, 1974: 183, 207). Nevertheless, distilling is, in most European countries, a more or less important outlet for domestic agricultural produce. Of our study societies, Switzerland and Poland are good examples of this. The link between agricultural supplies and the brewing industry is seldom as close, although it has some significance in some societies, such as the Netherlands (Commission of the European Communities, 1976: 15).

Many of the changes in alcohol control in the period 1950-1975 can only be understood against the restructuring of agriculture after the war. The declining agricultural population has meant that a smaller number of people now have access to the raw material for making wine, cider, or spirits, either for marketing or for their own use. This has reduced the production of non-commercial wine in countries such as Italy and France (Sulkunen, 1978). Switzerland has experienced a similar decline: the number of Swiss vineyards declined from 38,000 to 20,000 between 1950 and 1975 (Cahannes, 1981).

Also linked to the restructuring of European agriculture is the tendency for home production of spirits to decline. In Switzerland, farmers are allowed to distil fruits and berries, but only for the producer's own consumption. Despite the reduction in the number of farms, many ex-farmers have retained their privileges. This led the Federal Council, in 1962, to reinforce the rules governing the granting of tax exemption. A large number of tax-free distillers were thus moved into the taxable category of "professional contractgivers," a category which grew from 33,000 in 1951 to 79,000 in 1975. In addition to this, the Swiss monopoly is buying up stills in order to concentrate distilling in fewer units with a view to easier control (Cahannes, 1981; Zurbrügg, 1976).

As in other wine-producing countries, the Swiss wine policy reflects the general problems of agricultural economy. On the one hand, international competition necessitates a constant improvement in the productivity and quality of the agricultural sector. On the other, the income level of the agricultural population must be secured. As in other European wine-producing countries, the course taken in Switzerland to solve these problems has been to improve the quality of wine, to impose restrictions on new plantations, and to guarantee demand for domestic wine by state

purchases and by protecting the domestic market (Sulkunen, 1978; Cahannes, 1981).

The Californian wine industry has its own peculiarities. One of these is that it has never supported a substantial agricultural population. The growth of the Californian wine industry out of fruit-producing agriculture took place in the framework of a high degree of concentration, capital-intensive technology, and large-scale production from the very beginning, and it is still dependent on migrant labour. In terms of productivity, the Californian wine industry has always been competitive with imported wine. One essential problem for the industry has been the image of its product, which the state has helped to improve in close cooperation with the wine interests. Other important supportive measures have been the government provision of technological and scientific knowledge and special tax advantages (Bunce, 1980).

Agricultural priorities are not the only economic determinants of change in the state control of alcohol production. In many countries, a strict control system in the form of production monopoly is organized for other than agricultural reasons. Among our study societies, Finland and Poland are examples of this.

The monopoly system in Poland remained basically stable during the study period (Moskalewicz, 1979). In Finland, the private sector grew relative to the production by the Monopoly, mainly on account of the promotion of beer drinking. Also the private production of wines and liqueurs expanded, encouraged by the policy of the Monopoly to substitute domestic beverages for imported ones (Mäkelä et al., 1981). The Finnish example demonstrates the importance of the role of the state as a protector of the domestic industry. The Finnish situation also illustrates the connection between the control of alcohol production and the liberalization of international trade. The system of private local brewing monopolies was abandoned in the 1960s as a preparation for the agreement with the European Free Trade Association. This system limited the areas in which breweries could offer their products for sale through the state monopoly in order to reduce competition and transport costs. The abolition of local monopolies accelerated the concentration in the brewing industry (Österberg, 1974).

There was a universal increase in foreign trade over the study period. In the EEC countries, general trade policies had a significant impact on alcohol markets in certain countries (Sulkunen, 1978). In the Netherlands, the alcohol market has been largely restructured as a result of changes in import policies (Commission of the European Communities, 1976). In Switzerland, concessions to wine-exporting trading partners (who supply two-thirds of Swiss wine consumption) are tied to concessions benefiting Swiss exporters of cheese and breeding cattle — substantial components of Switzerland's agricultural economy (*Journal vinicole suisse*,

1974). The United States has made concessions to wine-exporting countries in exchange for concessions to U.S. military interests in those countries (Mottl, 1979). Whisky is a major export commodity for Ireland and Ontario and the rest of Canada, and therefore an important component in balancing foreign trade.

As tariff barriers are no longer allowed, governments and national alcohol industries have become increasingly interested in other types of protective measures. For example, restrictions on advertising may be used for protection purposes. Without advertisement, foreign products have little chance of competing with well-known domestic brands.

In the area of production, the control activities of the state have in some cases expanded, but they have lost much of their original purpose of limiting private profit-making and the supply of alcoholic beverages. The state has tended to discourage the production by private individuals via licensing and tax policy. On the other hand, however, state control in several of the study societies actively supported the growth of alcoholic beverage industries.

Pricing and Taxation Policies

Table 4.1 presents an overview of the main trends in the real prices of alcoholic beverages in the study societies. The clearest persistent cases of decline were California and the Netherlands. The decline in Finland was temporary and occurred in the early 1970s. The growth trend in Ireland was reversed in 1969 but, by the end of the period, the price level was still higher than in 1961. In Poland, prices of alcoholic beverages have been rising over a long period.

To what extent the price trends were affected by state action can be decided on the basis of the changes in the proportion of the tax element in prices. The proportion of the final price of alcoholic beverages that is attributable to taxation varies greatly among beverages and among societies. In all the study societies, distilled spirits are more heavily taxed per unit of alcohol than beer and wine. Taxes and monopoly mark-ups account for a high proportion of the final price in Ireland, Finland, Ontario, Poland, and Switzerland, and for a relatively low proportion in California and the Netherlands. In the highly taxed societies, up to over half the final price of spirits is attributable to taxation.

Since direct trend data are available only in a few cases, we must try to make rough estimates. It is known that in California (Bunce et al., 1981), in Finland (Mäkelä, 1980a), in the Netherlands (Sulkunen, 1978), and in Ireland (Walsh, 1980), alcohol taxation became lighter and thus contributed to a price development favourable to consumption growth. For other countries one must rely on guesses about the possible development of production and distribution costs and profits. Assuming that these costs

have not risen faster than the general inflation rate, the stable real price level indicates a relatively stable fiscal margin.

TABLE 4.1

*Main Trends in the Prices of Alcoholic Beverages,
Deflated by an Appropriate Consumer Price
Index, 1950-1975*

	Beverage	Years	Percentage Change
California ^a	Beer, leading brand (100% alcohol)	1955-1975	- 39
	Distilled spirits (100% alcohol)	1955-1975	- 45
	Dessert wine (100% alcohol)	1955-1975	- 18
	Table wine (100% alcohol)		- 8
Finland ^b	Wine	1951-1975	- 21
	Beer	1951-1975	- 14
	All alcoholic beverages	1951-1975	- 6
Ireland ^c	All alcoholic beverages	1961-1969	+ 22
	Beer	1961-1969	+ 38
	Spirits	1961-1969	+ 9
	All alcoholic beverages	1969-1975	- 11
	Beer	1969-1975	- 12
	Spirits	1969-1975	- 14
Netherlands ^d	All alcoholic beverages	1969-1977	- 26
Ontario ^e	All alcoholic beverages	1953-1973	- 3
Poland ^f	All alcoholic beverages	1960-1975	+ 36
Switzerland ^g	Wine	1961-1974	+ 10
	Beer	1961-1974	- 6
	Spirits	1961-1974	+ 18

Sources:

^aCarr, 1979; ^bAlkon vuosikirja, 1979; ^cWalsh, 1980; ^dOdink, 1979; ^eHolmes, 1976;
^fMoskalewicz, 1979; ^gLeu & Lutz, 1977.

It is often thought that the two most important purposes of alcohol taxation — the collection of public revenue and prevention of alcohol problems — are contradictory or that the “real” motivation

behind tax increases is revenue despite the public health rhetoric which frequently accompanies the increments. Given the steady increase in demand and the low price elasticities of at least some alcoholic beverages, it seems that during the study period this was not the case, not even in those societies where the fiscal margin has remained relatively stable. The state could have both increased its revenues from alcohol and kept down the rate of consumption growth by more stringent pricing and tax policies.

The relaxed price and tax policy is related to changes in the tax structures of modern states. Whereas in the first part of this century the main source of public funds were excise duties, the income tax has subsequently become the main form of taxation. It is likely that, in the future, the tax burden will be placed increasingly on general consumption taxation. The fiscal role of alcohol taxes has diminished, for which reason the fiscal argument in alcohol pricing has yielded to other considerations (Sulkunen, 1978: 84; Gough, 1979: 92).

One of the restraining influences on tax and price policy stems from inflation control. In contrast to general sales taxes, which are set on a percentage basis, alcohol taxation in most countries is based on excise duties, which have to be adjusted by separate and politically visible decisions. The sensitivity of taxation of alcohol in countries where it has a heavy weight in the cost of living is illustrated by the attempt in 1976 to introduce a "tax free" index in Ireland. This index purposely does not consider tax increases in estimating the cost of living and it is widely disregarded in labour negotiations. From the Irish experience, it is obvious that it has been politically difficult to raise excise duties on beer as much as the inflation rate had required (Walsh, 1980). The wish to combat inflation was the main reason why real prices of alcohol were allowed to decrease from 1970 to 1974 in Finland (Mäkelä et al., 1981). In Poland, on the other hand, the tax element in the retail price of alcoholic beverages is used by the state as a way of absorbing excess purchasing power, and alleviating the problem of suppressed inflation (Moskalewicz, 1981).

A further determinant of relaxed taxation and price policies is related to the structure of the industry. The increased political weight of big companies in the alcohol industry may have influenced alcohol taxation directly in their favour (Bunce et al., 1981).

In addition, in the European Community countries, economic integration has lowered alcohol taxes in the new member countries, where they have traditionally been at a higher level than in the original six (Sulkunen, 1978, 66-70). This had some impact on Ireland.

And finally, as in the other areas of alcohol control, the problems related to alcohol have not been regarded as important enough for, or as amenable to, control by means of pricing and tax policies. In most of the societies studied, there has been a decline in the political influence of temperance groups which has only been partly offset by the emergence of

public health interests pressing for preventive price strategies (Single et al., 1981).

Distribution

At the time when the systems of control were first established, regulating the sale of alcohol was often seen as the most efficient way of reducing alcohol-related problems, and generally it was the retail section of the alcohol market that was subjected to the most elaborate controls by the state.

Complete trend data on the density of retail outlets are difficult to obtain, particularly for countries with a great diversity of outlets (Table 4.2). The coverage of the data also varies depending on the legislation in each country. Thus, no data are available on the number of outlets for beer in Poland, as no special licence is required for selling beer (Moskalewicz, 1981), and the data pertaining to off-premise outlets for beer and wine in the Netherlands are based on approximate figures on the total number of vegetable, dairy, and grocery stores. Furthermore, the classification of outlets varies from one country to another. In some countries, such as Finland, the division between on-premise and off-premise outlets is very rigid. In other countries, such as Switzerland and the Netherlands, many on-premise outlets also sell for off-premise consumption. The relative significance of each type of outlet also varies from one country to another and has often changed over time. In terms of number of outlets, the on-premise network is substantially larger in several jurisdictions (e.g. Finland and Ontario) than the off-premise network. For example, in Ontario the number of licensed premises has increased more rapidly in the latter part of the study period than is the case for liquor, beer, and wine stores combined. Nevertheless, the lion's share of total volume of sales continues to be via off-premise outlets. Strictly quantitative comparisons between countries are usually not possible, and even comparisons over time are often problematic.

For some of the study societies, it is known that the number of both off-premise and on-premise outlets increased during the study period. The growth is notable above all in Finland and Ontario. Even in the societies where the number of outlets did not increase or in fact declined, the capacity of the retail trade generally grew as its structure changed. Small specialized shops tended to become superseded by discount stores and supermarkets almost everywhere, with the exception of societies where the retail is under state monopoly. Increased average unit size is also a characteristic of the restructuring of the on-premise trade. In addition, the post-war period saw a growing diversity of kinds of on-premise outlets even in the societies where their number declined.

TABLE 4.2

*Number of Retail Outlets for Alcoholic Beverages
Per 100,000 Population Aged 15 and Over, 1950
and 1975*

		1950	1975
California ^a	Off-premise	260	140
	On-premise	280	170
Finland ^b	Off-premise outlets for medium beer only	—	324
	other outlets	3	5
	On-premise outlets for medium beer only	—	83
	other outlets	15	40
	Spirits on-premise licences	583	496
	Occasional licences	81	—
Ireland ^c	All other (mainly wine and off-premise) licences	80	158
	Off-premise distilled spirits	18	37
	wine and/or beer only	N.A.	380 ^d
Netherlands ^d	On-premise	317	349
	Off-premise	12	18
	On-premise	57	78
Poland ^f	Off-premise	162 ²	176
	On-premise	36 ³	45
Switzerland ^g	Off-premise	621 ⁴	301
	On-premise	631 ⁴	470

¹ 1973; approximate figure² 1970³ 1971⁴ 1955*Sources:*

^aCalifornia State Board of Equalization, 1950 and California Department of Alcoholic Beverage Control, 1975; ^bÖsterberg, 1981; ^cWoods, 1976; ^dProduktschap voor Gedistilleerde Dranken, Annual Reports and Centraal Bureau voor Couranten publiciteit, 1973; ^eLiquor Control Board of Ontario, Annual Reports and Single & Giesbrecht, 1979; ^fWald et al., 1981; ^gRencensement fédéral des entreprises, 1955 and 1975.

In some cases, these changes required major legislative reforms. A notable example is Finland, where a new law made it possible for the first time after Prohibition to open restaurants and off-premise retail shops in rural communities and release medium beer from Monopoly stores. As a result, the total number of restaurant licences increased by 20% and the number of full licences increased by 60% in one year. The number of monopoly stores grew from 132 in 1968 to 194 in 1975; 17,400 grocery stores and 2,700 cafés were licensed to sell medium beer (Ahlström-Laakso and Österberg, 1976).

Elsewhere, the expansion of the retail trade occurred by means of gradual minor reforms of the existing licensing laws. In Ontario, the Liquor Licence Act of 1946 had been amended seven times by 1975. These changes made theatres, cinemas, airplanes, holiday resorts, convalescent homes, and hospitals eligible for licences. Some regulations against drinking in restaurants and dining lounges were also lifted (Single and Giesbrecht, 1979).

The licensing laws of California experienced a similar gradual change. Since the end of Prohibition, California has limited the number and types of licences for on-premise consumption. In 1935, when the Alcohol Beverage Control Act was introduced, only a few types of licences were available. In 1939, their number was severely restricted. These restrictions remained stable until 1965. Since then, the number of types of licences available increased considerably although the total number of licences per capita remained about the same. Licences for the sale of beer only were numerous at the end of Prohibition, because they were the only ones not linked with the serving of cooked meals and their number was not limited. Their number diminished by 30% between 1950 and 1975. This decrease in the number of licences for the sale of beer only is explained by the fact that licences for wine and beer became available in 1955 and that taxes were the same (Bunce et al., 1981; Mosher, 1979). In other cases, new licences were granted by the California legislature simply by creating particular exceptions to existing laws and regulations (Mosher, 1979).

In many of the study societies, the expansion of the retail trade required no legislative reforms at all, as changes in the administration of existing laws effected essential changes in the retail structure. For example, in Ireland, where consumption traditionally took place in public houses or in bars, a diversification in the types of drinking establishments was taking place. Restaurants, hotels, private clubs, discotheques, and night clubs were added to the list of places where alcohol can be drunk, and exemptions with regard to times and locales became commonplace (Walsh, 1980). Yet the laws governing the distribution of licences have changed very little since the World War I. It is in general not possible to open a new public house unless another one closes. In view of the faster population growth in urban areas, the present situation is somewhat unbalanced, some small

towns having up to one establishment for as few as 100 inhabitants. A commission recently proposed a more flexible system of granting licences (Restrictive Practices Commission, 1977).

Finally, in some cases the expansion of retail trade took place independently of any state regulations. In Switzerland, the trade is regulated by a "necessity clause," which limits the number of outlets per inhabitant in each community, but the actual number of outlets often exceeds the stipulated number. The number of outlets per inhabitant decreased over the study period, but concentration and bigger outlets increased the actual availability of alcohol (Cahannes and Müller, 1981b). Similar maximum rules were in force in the Netherlands until 1967, when such rules, considered to be outdated, were repealed (de Lint, 1981b).

The economic determinants of these developments were slightly different in off-premise and on-premise retail. The off-sale structure of the whole food distribution industry experienced a remarkable change in the course of the 1960s. Stacey and Wilson (1965) call this "the second commercial revolution" to signify its qualitative importance. Concentration in this industry has been accompanied by integration of the retail and wholesale sector. Rationalization has led to larger shops carrying a wide range of goods. All these changes have put pressure on the traditional licensing rules, originally geared to retail systems based on a large number of independent wholesalers and specialized retailers (Sulkunen, 1978).

These developments have indirectly influenced the licensing systems and the availability of alcoholic beverages. In many cases, the interests of the retail trade were in conflict with the interests of the producers who found restrictive licensing rules helpful in exercising control over retailers. For example, relaxation of the Dutch licensing law in 1967 did not result in an essential increase in the number of outlets, but it facilitated competition between food distribution chains and the traditional wholesale-retail system controlled by distillers and brewers (Commission of the European Communities, 1976: 99-106).

Another important source of influence on distribution was the growth of tourism over the study period. Mass tourism requires active marketing, highly developed organization, extensive planning, and a wide array of services. The state has, in many cases, assumed a heavy share of the responsibility for carrying out these functions. A less restrictive licensing policy has often been justified on the basis of benefits to the tourist trade (Mosher, 1979; Walsh, 1980; Mäkelä et al., 1981; Single et al., 1981). In California, special licences have been created for recreational areas which are not taken into account in determining the ratio of licences to population (Mosher, 1979). Switzerland has experienced a similar concentration of licences in tourist areas (Cahannes and Müller, 1981b). In some cases, the state has promoted the restaurant and hotel industries not only by liberal licensing but also with other supportive measures

(Sulkunen, 1978), and in this way actively contributed to the increase in the availability of alcoholic beverages. This has often influenced the drinking of the local population more than that of travellers (Koskikallio, 1979).

Whereas, in the control of production, the scope and intensity of state involvement in the form of various kinds of regulations, subsidies, and neoprotectionistic rulings tended to expand, in the area of distribution, old restrictions were gradually lifted either by legislative reform, administrative decisions, or simply by not adjusting old regulations to new circumstances according to their original purposes.

Sales Practices

The erosion of preventive concerns is further evidenced by trends in the myriad regulations imposed on sales practices. Regulations applied to the location and opening hours of retail outlets, legal drinking age, restaurant practices, and restrictions of the right to sell alcohol to certain population groups were not usually designed to serve economic purposes, and almost always the main justifications for such restrictions were preventive. The material collected for this study from seven societies can be summarized very simply: the overall tendency has been to lift or weaken such restrictions.

Many countries have a tradition of special restrictions on the location of retail outlets. The original intent of these rules was to separate drinking from certain social groups or activities. Thus, special rules may stipulate the minimum distance of retail outlets from factories, schools, university campuses, or churches (Moskalewicz, 1979; Mosher, 1979). In California and Ontario, hospitals and rest homes have only recently become eligible for alcohol licences (Mosher, 1979).

Opening hours of off-premise outlets are generally not tightly preventive control policy. Restrictions in restaurant hours were relaxed in the study societies during the period 1950-1975 (Smits and van Loon, 1964-1979; Moskalewicz, 1979; Walsh, 1980; Cahannes and Müller, 1981c; Mäkelä et al., 1981; Single et al., 1981). This relaxation was due partly to new types of outlets such as nightclubs, private clubs, etc.

Opening hours of off-premise outlets are generally not tightly regulated. In California, liquor stores tend to open earlier and remain open much longer than other types of stores. Even in cases where state retail monopolies exist (Poland, Finland, and Ontario), liquor stores largely follow the opening hours of other stores (Moskalewicz, 1979; Mäkelä et al., 1981; Single et al., 1981).

Legal drinking age was lowered in Finland, Ontario, and Poland from 21 to 18 years during our study period (Moskalewicz, 1979; Mäkelä et al., 1981; Single et al., 1981). In the Netherlands, the legal purchasing age is 16 years for wine and beer and 18 years for distilled spirits (Smits and

van Loon, 1964-1979). In Ireland, the legal minimum age of 18 years is not strictly enforced (Walsh, 1980). In Switzerland, legal drinking age has long been rather low — 16 years (Cahannes and Müller, 1981b). An interesting exception to this generally lax legal approach to youthful drinking is California, where the relatively high legal drinking age, 21 years, has not been lowered but — contrary to the general trend — written into the Constitution of the State in 1955. Furthermore, this age limit is fairly strictly enforced at least at on-sale premises: infringement of this law is one of the most frequent reasons for licence withdrawal (Mosher, 1979a).

Regulations governing on-premise sales practices provide interesting traces for an archeology of alcohol control. Separation of the sexes and the protection of women was often one of the main aims of such regulations. No women bartenders were allowed until 1971 in California, and nude dancing is still not allowed (Mosher, 1979). In Ontario, there were public houses for males only and some for females only until 1971. Other restrictions controlled the quantity that could be sold to one person, the time a person was allowed to stay on premises, equipment and fittings of the premises, and types of activity allowed. The function of these rules was to separate certain activities (such as gambling or prostitution) from drinking, and to exclude or isolate certain social groups from drinking. In general, these systems of restrictions were radically simplified over the study period.

A similar tendency towards simpler and less discriminatory rules can be observed in the disappearance of restrictions on selling alcohol to members of ethnic or other minorities. Native Americans now have legal access to alcoholic beverages, denied to them for almost a century (Mosher, 1979).

Conclusion

Our review of changes in alcohol control has shown that the preventive and fiscal aims which the alcohol control systems originally pursued have been overridden by other functions. Control of distribution and sales practices has been liberalized so that market forces now have a much stronger influence on them than at the time when the alcohol control systems were founded.

Nevertheless, the state continues to have an important role in controlling the alcohol economy. In some cases, the state has even expanded its involvement in the alcohol economy. The Swiss, Finnish, Polish, and Ontario state alcohol monopolies have grown and show no signs of withdrawing from the market. Swiss wine policy is an important example of expanded state regulation of the kind that is common to all Western European wine and fruit-producing countries. Alcohol prices are still dependent on governments' pricing and taxing policies. In external trade, the state continues to have an important regulatory and protective role.

In general, the state continues to pursue restrictive policies in the non-commercial sector of both manufacture and distribution of alcoholic beverages, whereas the approach towards the commercial segment of the market has become less restrictive and more supportive. Such support is in most cases aimed at defending the domestic industries and, especially, domestic agriculture against foreign competition.

The enhanced role of economic factors as determinants of alcohol control is not surprising. Similar developments have taken place in other sectors of the economy. Many of the new determinants of alcohol policy are not specific to alcohol at all. The state has assumed growing responsibility for regulating and financing national industries and for guiding economic developments in general; the importance of specific interest groups has grown in all areas of public life; and agricultural policies have been carried out for broader reasons. The consequences of these trends for alcohol control have only been felt as the side effects of major national and regional concerns.

ALCOHOL CONTROL AND PREVENTION OF DRINKING PROBLEMS

At the time when alcohol control structures were established in most of the industrialized countries, one of the main aims was to reduce alcohol consumption and alcohol-related problems. It might, therefore, be expected that in a situation of increasing alcohol consumption and problems there would have been countervailing moves to tighten the control arrangements. In the period 1950-1975, economic considerations overruled preventive concerns. This does not, however, in itself explain the absence or weakness of preventive arguments in debates over alcohol control policies.

Arguments against Preventive Control

Alcohol control as defined in this study, i.e. intervention by the state in the production, trade, sales, or purchase of alcoholic beverages, is not the only approach that a society can take to deal with its drinking problems. Indeed, it was noted earlier that a rapid expansion of treatment services for alcohol-injured persons has taken place in all of the societies studied. In addition, social work agencies and the social security system have been charged with increasing responsibility in regard to alcohol problems. The load in dealing with the social alcohol problem as a whole has shifted away from alcohol control agencies to problem-handling agencies.

In some cases, the agencies responsible for the management of alcohol-related problems have become more differentiated from those responsible for the control of production and distribution. In 1974, the

director of the California alcohol control agency expressly stated that the agency's primary function was to maintain an orderly and respectable market for alcoholic beverages rather than to prevent alcohol problems (Kirby, 1974). The separation of problem handling and control functions renders it more difficult for the state to adopt a uniform and coordinated alcohol policy. This situation is exacerbated in federal countries where policy coordination is complicated by the division of powers.

In most of the study societies, no formal redivision of responsibilities has taken place. Nevertheless, the structure of government and of political debate does not encourage a discussion of alcohol control and alcohol problems in the same framework. A unified and coordinated alcohol policy is against the interests of both the alcoholic beverage industries and the treatment professions. On the one hand, the alcohol industry does not wish to have the costs of alcohol-related health and social problems interfere with its push for favourable treatment in price or licensing policy. On the other hand, the treatment system and particularly the so-called alcoholism movement would be averse to a cost benefit accounting of its services if it entailed consideration of alcohol tax revenues and economic benefits.

As the public emphasis regarding the nature of the social alcohol problem as a whole came to be laid more on treatment in the study period, the traditional control methods of limiting the availability of alcoholic beverages came to be seen as an archaic patchwork of laws and as irrelevant to contemporary life. Certain state commissions provided evidence of the ineffectiveness or impracticality of these measures: the committee reports on licensed trade in Ireland (Restrictive Practices Commission, 1977), England (Report of the Departmental Committee on Liquor Licensing, 1972), and Scotland (Report of the Departmental Committee on Scottish Licensing Laws, 1973) are examples.

In addition, intellectual support for liberalization measures came from sociological research on alcohol with the emergence of the "integrationist" or "socio-cultural" approach to the prevention of alcohol-related problems in the 1960s (Simpson, 1977). This approach held that many problems were a product of the lack of an integrated and internalized system of norms concerning drinking activities. This could be resolved, it was argued, by the early introduction and inculcation of responsible drinking habits and through the removal of certain legal constraints and regulations. Thus, the liberalization of control was encouraged as being consistent with a healthy drinking culture.

The integration approach was supported by the alcohol industry, in particular the brewing sector. In Canada and elsewhere, the breweries presented arguments to the government for the promotion of beer on the grounds that it was less harmful and represented a more responsible drinking pattern than spirits (see, e.g. Brewers Association of Canada, 1978).

Many changes in licensing regulations have been influenced by this approach (Single et al., 1981).

In most countries, changing notions of social equality and individual rights affected discussions of alcohol controls. In Finland, the traditional dryness of rural areas came to seem inequitable against the availability for city folk. California abolished "dry zones" around campuses, in part because they were seen as infringements of the liberties of those residing on them. Among other reasons, Sweden abolished the "motbook" system and Ontario the buying-slip system because the systems were thought to encroach upon personal privacy and liberty.

Alcohol and the Changing Agenda of the Welfare State

That control functions have become less prominent than problem-handling functions should be related to the possibility that the dysfunctional aspects of alcohol problems have changed. Modern life, which strongly separates public and private spheres and encapsulates private life in the nuclear family (Zaretzky, 1976), makes the use of alcohol and drinking problems less visible and turns them into private problems rather than public issues (Mills, 1970).

More specifically, it must be remembered that the alcohol question was an integral part of the working-class problem of the late 19th and early 20th centuries. Working-class drinking was viewed as a threat to the supply of a reliable labour force as well as to the social and political order. Furthermore, the organized segments of the working class often held alcohol partly responsible for the misery of the working man and his family. Middle-class temperance organizations similarly underlined their reforming mission in respect to the working class. Thus, the alcohol control arrangements were the result of a complex set of forces. They were an integral part of the state's attempt to deal with the working-class question. They were supported by public temperance sentiments from both the working class perspective of their own emancipation and the reformist perspective of the middle class.

In the period 1950-1975, the alcohol problem became less and less associated with the working class because of changes in the population structure and in lifestyles. In most industrialized countries, there was a rapid expansion of white collar occupations and an end to the growth of the relative size of the industrial working class (Wright, 1978). Furthermore, housing policies and the geographical mobility of the population destroyed old stable neighbourhoods, mixed diverse population segments, isolated the nuclear family, and thus destroyed many cultural patterns. The result has been a cultural homogenization of the population. The lifestyles of different classes and segments of the population are by now less distinct than some decades ago. The relationship between drinking problems and

social class is no longer as strong as it used to be. Objectively, the social alcohol problem has been transformed from a public issue of class discipline into a problem of individual deviance or disease.

It is evident that the shift of the locus of alcohol problems from the bottle to the man and the simultaneous relaxation of traditional restrictions on availability are related to one another. In the sociological literature on alcohol problems, treatments and other forms of handling of problem drinkers have been offered as a substitute for restrictive controls on availability (Wilkinson, 1970). Yet the shift of emphasis from control to treatment should not be seen solely as a reaction to the alcohol problem. More fundamental reasons for this development may be found in the changing role of the welfare state.

The lack of preventive concerns in alcohol control in the post-war period may seem paradoxical in the light of the great expansion of state activity in the economy and especially in the social and welfare sector. A starting point for resolving this paradox is to regard the absence of preventive goals in alcohol control as not implying a diminution of state involvement in the alcohol sector. As shown earlier, the state continues to exercise its control functions in this area, often on an expanded scale. It is in the mode of state involvement that we can see a change. Alcohol may be subject to fewer regulations as a special commodity, but it is subject to a great deal more regulation simply by virtue of its being a commodity. The alcohol control functions have become a minor but integral part of the state's increased economic functions.

The growing economic involvement of the state does not mean that the state has taken over the role of the market in capitalist economies. On the contrary, the state's policies have aided the infiltration of the non-commercial pockets of the economy by market relations (Hirsch, 1980). In alcohol control, this has taken the form of the opening up of alcohol retail to market pressures and the suppression of non-commercial production. Even the expansion of treatment systems can be viewed as part of this more general process. Illich (1976) has described the "medicalization of life" in capitalist countries as a process whereby the submission of health care to market forces leads to a growth in the medical services at large.

The defining characteristic of the welfare state is its attempt to secure consumption possibilities for everyone through family allowances, pension schemes, and social insurances of various kinds, thereby dealing with both the problem of securing an adequate supply of labour and the problem of political legitimacy (Gough, 1979: 84-94). The expansion of welfare also includes the provision of health services and education. All of these tasks have, by their sheer magnitude, overshadowed the importance of prevention of specific social problems such as those related to alcohol.

Further, the shift in emphasis from restrictive alcohol control to the treatment of individual problems is in harmony with developments in

the management of other types of social problems and deviance. In criminology, particularly in the area of juvenile delinquency, the emphasis has shifted away from the penal domain into the sphere of psychiatry and social work (Donzelot, 1979), a development which is very similar to the decriminalization of public drunkenness and expansion of alcoholism treatment services.

Finally, another source of influence on the trend away from alcohol control has been changes in the scope of state intervention in private behaviour, particularly with regard to the working class. Restrictive alcohol control could be seen as one aspect of the state's attempts to regulate the consumption and leisure patterns of the working class earlier this century. Similar controls were placed on other aspects of private life and recreation (dancing and public amusements, gambling, etc.). Such regulations took various forms, ranging from total prohibition to educational efforts in the newly established public primary school system (Donajgrodzki, 1977; Donzelot, 1979).

One of the most important developments in the political structure of most Western states in the post-war period was the integration of working-class organizations into government (Gough, 1979: 56-69), with concomitant policies that resulted, in varying degrees, in a convergence in the lifestyles of different classes and groups. Participation of working-class parties and even trade unions in the management of the state in many countries contributed to the adoption of modern welfare schemes, which in the post-war period was concomitant with a decline in such regimentation of lifestyles as is entailed in limitations of the availability of drink.

Thus, there has been a number of important changes in the role and tasks of the welfare state, which have not only coincided with the developments in alcohol control but, in fact, made alcohol consumption less and less a separate target of state action. The fact that preventive alcohol control and problem-handling have been historical alternatives is therefore not a result of a simple homeostasis between the two. Rather, it is the result of two different processes. On the one hand, social and health problems related to alcohol have become increasingly integrated into the major policies and programmes of the welfare state. On the other, the welfare state has become less concerned with regulating consumption and other aspects of private behaviour.

It is quite natural for alcohol to lose some of its earlier priority in the process, despite the bureaucratic and professional interests created by the expansion of the treatment sector. The disparity between increasing state intervention in the economy and decreasing preventive restrictions on the availability of alcoholic beverages is thus merely apparent. In fact, the state's evolving alcohol policy in the post-war period is part and parcel of the changing role and general profile of the modern welfare state at large.

5. Effects of Alcohol Control Policies

CONTROL, CONSUMPTION, AND CONSEQUENCES

Policy-oriented alcohol research usually attempts to identify the effects of single-event control measures or a series of quantifiable changes. Such research entails special studies which were beyond our scope. There is, however, a varied literature on the subject, some works of which deal directly with the societies included in our project.

There are two branches of literature on the relations between controls and consumption. The first is a relatively large econometric literature on the relation of alcohol taxes and prices to consumption (Bruun et al., 1975; Österberg, 1975; Ornstein, 1980). The other considers non-fiscal alcohol controls and includes a number of reviews drawing together the somewhat scattered literature on the relation of controls and the availability of alcohol to alcohol consumption (Bruun et al., 1975; Popham et al., 1976; Room, 1978a).

Because taxation or monopoly mark-ups often are essential elements in the final price of alcoholic beverages, whether, and in what ways, price manipulation by government influences consumers is a politically sensitive issue and of practical importance in alcohol research. The effect of price on consumption has been more extensively investigated than that of any other potential control measure (see e.g. Huitfeldt and Jorner, 1972; Bruun et al., 1975; Lau, 1975; Österberg, 1975; Ornstein, 1980). Since long-term data on prices and consumption are available in many cases and since the econometric methodology of such studies is sophisticated, these effects are often estimated quite accurately.

Price elasticity expresses the way in which the consumption of a commodity responds to changes in its own price. If the elasticity is (in absolute value) greater than -1.0, the demand for the commodity is price elastic. In other words, a 10% increase in its price leads *ceteris paribus*, to a greater than 10% decrease in its consumption. If the price elasticity is (in absolute value) smaller than -1.0, the demand for the commodity is price inelastic. Price inelasticity does not imply that the demand for a commodity is insensitive to prices. Thus, an elasticity value of -.8 indicates that a 10% price increase leads to an 8% decrease in consumption.

There is no single method for estimating elasticities. Some investigators have estimated elasticities for all alcoholic beverages, others

have estimated separate elasticities for spirits, wines, and beer, and for off-premise and on-premise consumption. Some studies have relied on cross-sectional consumption data, for example from household expenditure surveys, while others have used time series, for example from sales statistics or tax records. Price series have been calculated using the prices of the most popular brands or using the weighted price of all alcoholic beverages. Some investigators have used static models, others have relied on dynamic models. Yet another source of variation is econometric technique: owing to differences in model specification and estimation method, differences in results ensue. In spite of many problems in interpretation, econometric analyses have shown that fluctuations in the demand for alcoholic beverages can, by and large, be explained statistically in terms of changes in prices and income. Alcoholic beverages appear, therefore, to behave on the market like other goods.

Taken together, these studies support the basic conclusion of Bruun et al. (1975) that alcohol controls, in some circumstances, affect alcohol consumption levels.

The impact of alcohol control on consumption, as such, is of little interest to prevention concerns. It becomes important only if a positive relationship between the overall level of drinking and the incidence of alcohol problems is found to exist. The historical experience of the study societies regarding the impact of the wave of increasing consumption on alcohol problems has been discussed in Chapter 3. Because of the importance of the subject from a policy perspective, however, these experiences now deserve to be related to what is generally known from the literature.

Bruun et al. (1975) review the evidence for strong temporal relationships between consumption and cirrhosis. Brenner (1975) offers some new twists to the analysis of consumption and cirrhosis, while Skog's work (1980) considerably advances the conceptualization and modelling of such analysis (see also comments on Skog's article in the same issue by de Lint, Schmidt, Popham, and Bruun). Across all data sources — even for cross-sectional comparisons between different places — a strong relationship is found between the level of consumption and the rate of cirrhosis mortality and probably of other physiological consequences of long-term heavy drinking. Later work has, if anything, strengthened this conclusion by Bruun et al. (1975).

Relations of alcohol consumption level and patterns to casualties and social problems associated with drinking are far less clear and universal (for a review of the literature, see Mäkelä, 1978b). In cross-sectional comparisons of societies, correlations of these problems with consumption level are frequently negligible or negative. It is clear that both patterns of intake and societal response to alcohol problems have to be taken into account as mediating factors between the level of overall consumption and

social consequences of drinking. Prevailing patterns of drinking generally seem, however, to persist up to a point in face of changes in the level of consumption. It is thus understandable that there have been numerous historical instances where the bulk of alcohol-related problems have moved in concert with trends in consumption. As shown in Chapter 3, with respect to our study period, the relationship between changes in consumption and the incidence of casualty and social problems is, however, historically conditioned and depends on transformations both in patterns of drinking and in social response.

Earlier, we discussed studies that attempt to pinpoint the causal effects of changes in control measures or in the availability of alcoholic beverages. From a policy perspective, it is perfectly legitimate to be primarily interested in the autonomous impact of alcohol control on consumption and problems. From a historical perspective, the notion of effect is problematic. It is true that in a number of cases, a single measure can be shown to have had a "historical effect." Yet it is methodologically misleading to ask to what extent changes in consumption can be causally explained by control. Most of the time, changes in policy measures have, in fact, been one facet of the same general social processes, and changes in consumption, another.

For example, econometric demand analysis is very far from explaining the temporal and spacial variation of elasticities, although general economic theory offers some useful distinctions between types of commodities. Furthermore, historical change is often incorporated in econometric models in the guise of trend factors or dummy variables. The whole methodology thus aims at holding constant the influence of factors other than prices and income, precisely because demand analysis is not normally meant to provide historical explanations. Nor has demand analysis anything to say about which economic and political forces have determined the changes in income and prices. Demand analysis mainly provides instruments for decision-making and predictions of the effect of future price decisions on the basis of an analysis of data on the recent past. If an actor is free to increase or decrease the price of a commodity, then econometric models predict how the demand for that commodity will react to the change. It would thus be as wrong to deny the potential of taxation for regulating the consumption of alcohol as to contend that prices and income are sufficient explanations of fluctuations in consumption.

It is even clearer that non-fiscal alcohol controls cannot be regarded as the primary cause of the changes that have occurred in alcohol consumption over the study period. Control legislation both expresses and molds the climate of opinion, and both law and opinion change in response to economic and social transformation. Nevertheless, it may make a difference whether or not popular sentiment is transformed into state policies; this is suggested by a comparison of the Dutch and Finnish experiences.

Early this century, popular support for the temperance movement was at least as strong in the Netherlands as in the countries that enacted prohibition. In 1912, about a fourth of the Dutch adult population signed a petition requiring local option. Only the two-chamber structure of the Dutch legislature prevented this mass sentiment from being translated into legislation. In the early 1920s, the House of Commons twice passed local option legislation, but both bills were rejected by the Senate, the first time by one vote only. The temperance ethos that permeated the Dutch population was virtually strong enough to dry up the whole country without the support of legal coercion. The clash between the popular climate of opinion and the legislature meant, however, that there were virtually no legal impediments to an increase in alcohol consumption once the temperance ethos started to wear off. Nor had any state bureaucracies been erected that could have perpetuated social concern about drinking on an official level when the temperance movement lost its mass support (de Lint, 1981b).

The Finnish situation was, at the outset, very similar to that prevailing in the Netherlands. Prohibition bills repeatedly passed by the Finnish parliament were one after another rejected by the Russian czar (Hytönen, 1921). After independence, prohibition was enacted in 1919, and the legislation remained quite restrictive even after its repeal in 1932, when alcohol control passed into the hands of the powerful State Alcohol Monopoly. The 1932 control legislation was quite obviously able to damp up potential demand in the face of more permissive popular attitudes towards drinking; this is clear from the way alcohol consumption made a 50% leap in 1969, the first year of a more liberal legislation (Mäkelä et al., 1981).

Elasticity values are not inherent attributes of alcoholic beverages. They are influenced by the availability of alcoholic beverages, prevailing drinking habits, and, more generally, by the economic and social conditions which affect the consumption of alcohol. Elasticity values for wines show an extremely wide variation (Ornstein, 1980). This is probably an accurate reflection of real life: the role of wine drinking differs from country to country and it can only be expected that consumers in countries using wine as food will react differently to a change in wine price from those culturally disposed to drinking for the sake of getting drunk. The demand for beer seems to have been price inelastic in the U.S. and Canada (Ornstein, 1980) as well as in Ireland and Finland (Walsh and Walsh, 1970; Nyberg, 1967). Beer elasticities thus show some consistency. The same cannot be said for spirits. In the U.S. and Canada, the demand for spirits seems to have been price elastic (Ornstein, 1980). In Ireland and Finland, it seems to have been price inelastic (Walsh and Walsh, 1970; Nyberg, 1967).

Work on the effects of aspects of availability other than price varies considerably in its technical sophistication, and in the extent to

which it can be regarded as testing the causal nature of relationships. Often the material analyzed consists of cross-sectional comparisons or correlations across different regions (Room, 1974; Gerson and Preston, 1979; Parker and Wolz, 1979). Such data, though often thought-provoking, can hardly be regarded as solid evidence for the existence of causal relationships. Yet researchers seldom resist deriving causal statements from their cross-sectional comparisons.

Somewhat stronger evidence in regard to the nature of the relationship is offered by time-series analysis. One problem in measuring the effects of non-fiscal alcohol control measures is the paucity of meaningful quantitative data on them. In some of the econometric studies mentioned above, however, changes in the control system are accounted for by dummy variables. In this way, even tiny changes, such as the introduction of new brands of alcoholic beverages or minor revisions of buyer control, are shown to have measurable effects on overall consumption (Nyberg, 1967; Huitfeldt and Jorner, 1972).

Time-series analysis has the advantage of holding many cultural factors more or less constant, but is not very effective when it comes to ruling out or choosing between alternative models of relationship. More illuminating in this regard is the "natural experiments" literature: studies, often with controls, of what happens when there is a discontinuous change in one area of concern. There is a small classic literature on what happens to consumption and alcohol problem indicators during periods of massive change — usually wartime or national prohibition — that has greatly changed both alcohol control and supply (e.g. Warburton, 1932; Terris, 1967; Wilkinson, 1970: 36-41; Smart, 1974b). The studies of the Finnish alcohol reform of 1969 might be placed in this class. There are also numerous controlled studies of the effects on consumption and problems of smaller changes in alcohol availability, such as the opening of a new liquor store, the introduction of self-service stores, or changes in opening hours (Kuusi, 1957; Smart, 1974a; Mäkinen, 1978; Säilä, 1978, Kaski, 1978; Nordlund, 1979; Wittman, 1980). There is also a methodologically-sound North American literature on the effects of lowering the minimum drinking age on youthful drunk driving casualties (Whitehead, 1977; Douglass, 1980) — a literature which is about to be complemented by studies of recent re-raising of the age in a number of states and provinces. There is a separate literature on the effects of alcohol supply shortages following strikes in the distribution system (Alkoholkonflikten, 1965; Smart, 1977; Brown, 1978; Single, 1979; Mäkelä, 1980c). This offers some of the strongest evidence for a direct linkage between changes in the availability of alcohol and changes in the incidence of alcohol-related problems.

Popular sentiments also affect the enforcement of legislation. Many a control attempt has failed to change consumption because a piece

of legislation has not been effectively enforced. Sometimes legislative bodies enact purely symbolic legislation not seriously meant to be enforced, and sometimes the state bureaucracy is simply unsuccessful in enforcing a regulation. In Poland, sales commissions were discontinued in an attempt to discourage waiters from serving alcohol. This policy brought about illegal sales: waiters served alcoholic beverages bought in retail shops and pocketed the catering margin (Podgórecki, 1968).

The actual impact of control legislation is dependent on the political and legal traditions prevailing in each country. Many North American jurisdictions, for example, traditionally express moral concern in the form of detailed legislation that is neither felt as always binding by the population nor consistently enforced. In countries where the law has greater respectability, such as Scandinavia and Switzerland, purely symbolic pieces of legislation normally do not get passed, whereas those that do, are meticulously enforced and observed.

The issue of enforcement is a factor in price policies and non-fiscal control measures alike. In industrialized societies, the state is normally powerful enough to carry out whatever taxation policies the central government has endorsed. This has not always been the case. In Ireland, the British government had to engage in a precarious struggle to establish the supremacy of the highly taxed "parliament whisky" over the illicitly distilled local poteen in the 18th and 19th centuries (Connell, 1961), and in many developing countries today, centralized price policies have little bearing on the considerable non-commercial production of alcoholic beverages.

Whether effectively enforced or not, formal alcohol control policies are not the only factors affecting the actual availability of alcoholic beverages. Finland experienced a dramatic increase over the study period in the density of its retail network for alcoholic beverages, and Ontario a more gradual increase, but in California and Switzerland the number of places selling alcohol per head of the population fell during the study period. Meanwhile, in all these societies, consumption increased quite substantially in net terms. It is true that the number of sales licences indicates only one dimension of the control system, and that other control actions may be more crucial. It is also true that hidden behind the stability or fall in the number of licences is often a dramatic change in the nature of the outlets — from small stores to large supermarkets, from counter service to self-service. But this last point helps underline the fact that the formal alcohol control system is only one factor in a whole matrix of economic and cultural influences on actual availability.

In the course of our study, our interest in patterns in very different cultural contexts and in gradual, incremental, and perhaps synergistic changes took us away from the familiar territory of controlled studies of specific single changes and led us towards a broader approach involving

the historical analysis of economic, social, and cultural trends. Our focus on the control structure and its determinants underlined for us the unjustifyability of presuming, for the real world, the idea of the autonomous "independent variable" that is so central to classical causal analysis. Our interest in larger processes of change and in the rhetoric of public discussion of alcohol controls and problems detached us from the narrow limits of a mechanical model of the causation of human behaviour, a model in which controls are seen as acting on people much as shocks act on an isolated rat in a maze.

SYMBOLIC INTERRELATIONS

Apart from their direct effects on consumption, alcohol control policies are also a feature of the continuous structuring and restructuring of cultural frameworks. The symbolic relevance of state actions may be significant even in the absence of direct short-term effects. This has an analogy in media research, where a long history of efforts to detect the direct effects of different types of messages has ended in a mass of disappointing evidence. This has led the search away from the single aftereffects of the media to the more diffuse consequences of patterned repetition and to the effects which this cumulatively produces in the cultural frameworks we use to understand our everyday world (Tudor, 1979).

The existence of a worldwide network of mass media and the publicity which surrounds state actions tend to turn the political process into a performance of moral drama. Every legislative act must declare its justifying principles, every administrative ruling must launch its publicity release, every proposal must face its press conference. As in other areas of life, the symbolism of political action and the action itself do not always match. Most alcohol policy measures in the study societies bear a preamble, stating that their purpose is to curtail alcohol-related problems, whatever their pragmatic goals and concrete effects may be. In California, for example, a frequent response to the dilemma of having to satisfy both politically articulated economic interests in alcohol and unorganized but relatively "dry" popular sentiments has been to present new policy measures as promoting temperance (Bunce et al., 1981).

The state is not the only actor engaged in molding cultural frameworks. Changing the cultural perception of, and symbolism surrounding, a behaviour is a preoccupation of social reform movements as well, and their ideologies are often encoded in legislation. There is no doubt that the American temperance movement has had a long and continuing influence on American thinking about alcohol (Levine, 1978).

The broadest of the cultural choices involved in the representation of alcohol from a control perspective is whether it is to be regarded as a consumer commodity like any other, or whether it is to be singled out

from ordinary commerce for special treatment. Where the culture's choice is integration into daily life as a regular commodity, the symbolism, at least with respect to state control actions, is simple. Alcohol is a "good creature of God," as the American Puritans had it, to be enjoyed along with other fruits of the earth (Levine, 1978).

Where the choice is for segregation, the picture is more complicated: several competing symbolic meanings of alcohol can be invoked to justify segregation. The temperance movements of the 19th century tended to regard alcohol, on the one hand, as causing violence, social disruption, and family abuse and neglect and, on the other, as addictive and erosive of willpower. While the modern North American alcoholism movement perpetuated the latter image, it defused its control policy implications by locating the addiction in particular predisposed individuals rather than in alcohol (Room, 1978b). Other images of alcohol represented in current thinking stress alcohol as an agent in accidents and as an etiological factor in somatic disease.

VESTED INTERESTS REINFORCED BY CONTROL

Control structures often reinforce vested interests which then tend to acquire a vitality and continuity of their own.

Where the control system operates on the basis of licensing rather than public monopoly, the granting of licences itself usually creates vested interests in the industries. State licensing, especially when a limited number of licences are available, creates a partial monopoly, and often imparts a private property value to the licences issued. For this reason, while new licences are issued as population increases in a particular locality, existing ones are not always withdrawn when population declines. This has created remarkable imbalances in the density of outlets in Ireland (Restrictive Practices Commission, 1977: 34-59) and California (Mosher, 1979: 7).

The control apparatus has also been used to exclude newcomers and to protect the existing operations from new competition. In this, the self-protective associations of manufacturers and retailers have usually played an active role. At the retail level, specialized merchants and restaurateurs have attempted to use the control system to keep the powerful and growing food retail chains out of the alcoholic beverage market. Such conflict has been acute in the Netherlands, where the brewers and distillers had long been able to control the retail of alcoholic beverages under the auspices of the governmental regulations, but have now lost their position to food chains owing to changes in legislation and other regulations (Commission of the European Communities, 1976).

At the manufacturing level, the control apparatus has, in many cases, successfully been used to protect local industries, a tendency that

seems to have grown in importance as a consequence of the gradual elimination of other types of trade barriers. Advertising regulations tend to be biased against importers (Virtanen, 1980), and taxing and price policies frequently have been used to support local production (Mäkelä, 1980d; Bunce et al., 1981; Cahannes and Müller, 1981c; Single et al., 1981).

The consequences of a policy measure or change in legislation for the industries are often long-term. Expansion in the volume of alcohol production and sales diversifies and broadens the group of people whose livelihood is, at least in part, dependent on alcohol. The best example of this is the Finnish 1969 legislation, where the sudden increase in the demand for alcoholic beverages stimulated large-scale investment, particularly in the restaurant sector. When the boom subsided, the over-expanded restaurant industry made a bid for extra support from the State Alcohol Monopoly, on the economic grounds of having to keep the labour force employed and the relatively large investments secure (Koskikallio, 1979).

This is one illustration of the difficulty of cutting back on the rate of alcohol consumption. Quite apart from trends in the political climate or the pattern of individual consumption histories, there is a built-in ratchet mechanism in alcohol control. Because of vested interests supported by state intervention, it is always easier to create new outlets or new manufacturing establishments than to put existing ones to other uses.

A similar mechanism operates in countries having a public alcohol monopoly. Whether in a socialist state (Poland) or in a capitalist one (Finland, the monopoly states in the U.S.), the recent growth in the business they handle has lent them a momentum of their own. Though originally their purpose was predominantly "the promotion of temperance" and reduction of drinking problems, they are responsible now for the profitable management of large investments as well as provision of public utility to customers.

The vested interests of the private sector, in many cases, have turned the original temperance goals of the control arrangements into economic ones. This is very clearly the case in California, where, because of the increasing power of the wine-producing sector, the "tied house regulations" that originally ruled out control of retail outlets by producers have been subject to special interest exceptions. Similarly, the anti-competitive fair trade regulations, originally designed to control retail prices, now guarantees profitable prices set by the producers but enforced by state agencies. The fair trade regulations were ruled unconstitutional by the California Supreme Court in 1978 (Bunce et al., 1981).

The creation of vested interests is an example of the side effects alcohol control arrangements may have. The increasing power of the industries, itself a result of expansion and concentration, often has had, in turn, a decisive influence on the control system. In the case of California, it has been concluded that state agencies have lost their function as con-

trollers of the industry and become, instead, merely mediators between different competing interests (Bunce et al., 1981). Furthermore, the expansion of the distribution network has diffused the economic interests and allowed a growing number of parties to become involved.

6. Drinking, Consequences, and Control: The Post-War Era and the Future

Our exploration has ventured into three main areas: consumption and production of alcohol; adverse consequences of drinking; and alcohol control policies. The aim of the first section of this chapter is to tie these three areas together by reviewing our main findings. In the latter part of the chapter, we focus on new trends that have gained strength over recent years and identify some of the social forces that may affect future developments.

THE PERIOD OF AN INCREASING ALCOHOL CONSUMPTION: A RECAPITULATION

The most obvious way of linking our results is to emphasize the correspondence between the three areas and to look at phenomena specific to alcohol in the broader context of general economic production and consumer behaviour, problematic or deviant behaviour, and state action on the economy and social order.

Our study period was marked by pervasive changes in the economic structure and living conditions, by large-scale migration, increased economic independence, and relative isolation from wider social networks of individuals and nuclear families. Traditional moral views of leisure and consumption were breaking down, and leisure was becoming more private on the one hand and more commercial on the other. In patterns of drinking, there was a weakening of local and subcultural traditions and a spread of international patterns of consumption, resulting in a greater variety of drinking styles with less distinct boundaries than previously. However, the process of diversification was mainly of an additive nature, leaving the core patterns of each culture intact. There was an overall normalization of drinking as a social activity and as consumer behaviour. The disreputability of alcohol was fading, age and sex segregation was breaking down, and drinking became integrated with other social activities.

There was also a corresponding normalization of alcoholic beverages as economic commodities. Alcohol became increasingly intermingled with other products, while alcohol production and trade suc-

cumbed more and more to general economic forces pushing towards horizontal and vertical concentration.

Together with increasing consumption was a general increase in the adverse consequences of drinking. There was also a shift in the locus of problems from the lower class and deviant subgroups to the middle class. Skid row inebriates were superseded or joined by middle class cirrhotics and drunk drivers. In other words, alcohol problems became normalized, too. This shift can be viewed as an episode in that long historical tendency for problems to move from outside society to inside it — from bandits to vagrants to unruly proletarians to ordinary people. The shift in handling alcohol problems towards treatment services, not easily explained as a natural reaction to changes in the mixture of alcohol problems, can similarly be understood in terms of the historical trend away from the isolation and expulsion of deviant individuals towards treatment and continuous surveillance (Foucault, 1975).

The seemingly disparate trends in the field of alcohol control policies can similarly be assembled under the rubric of normalization. Since the turn of the century, there has been a general tendency towards a lessening of state regulation in the content of private consumption and use of time. In alcohol legislation this was manifested in the lifting of regulations which treated alcohol as a distinct commodity, withheld it from subordinate groups, and segregated drinking from other activities. On the other hand, the intensified state involvement in production in general and in the conversion into money of the value produced took the form of economic subsidies, government promotion of alcohol production, and protectionist measures. In contrast, arguments for the prevention of alcohol problems played a very small role in the formulation of control policies.

EMERGING TRENDS

Should the consumption of pure alcohol in the Netherlands continue to grow at the same pace as it did from 1960 to 1975, the consumption per adult would be 36 litres in 1990 and 111 litres in 2005 — a 75 litre increase in 15 years. These figures indicate the absurdity of predicting the future by mechanically extrapolating from trends prevailing over the study period.

It has been our argument that most of the detailed trends disclosed by our statistical data can be seen as complementary manifestations of the same processes of historical change, and we have dealt with the years covered by our study as a distinct period in the social history of alcohol. The flow of history cannot be chopped up by calendar years. The period of the study was a matter of technical convenience; the year 1975 is not in any

sense a turning point. Signs of a levelling off or a reversal of many of the trends discussed in this report emerge at different points of time for different phenomena and in different societies. Yet it was not only for the sake of convenience that we set the limits of our study at 1950 and 1975, dealing with the more recent trends separately. There are many indications of a genuine break in the social history of alcohol in that time and of the possibility that the societies included in the study are moving from one era to another.

From a policy perspective, the more recent trends and their future development are important in two respects. They have a bearing on the special efforts needed to reduce or to ameliorate alcohol problems, and they influence the feasibility of various preventive strategies, including alcohol control measures. Our look into the future should, therefore, deal not only with alcohol consumption and its adverse consequences, but also with social forces having an impact on problem-handling and control policies.

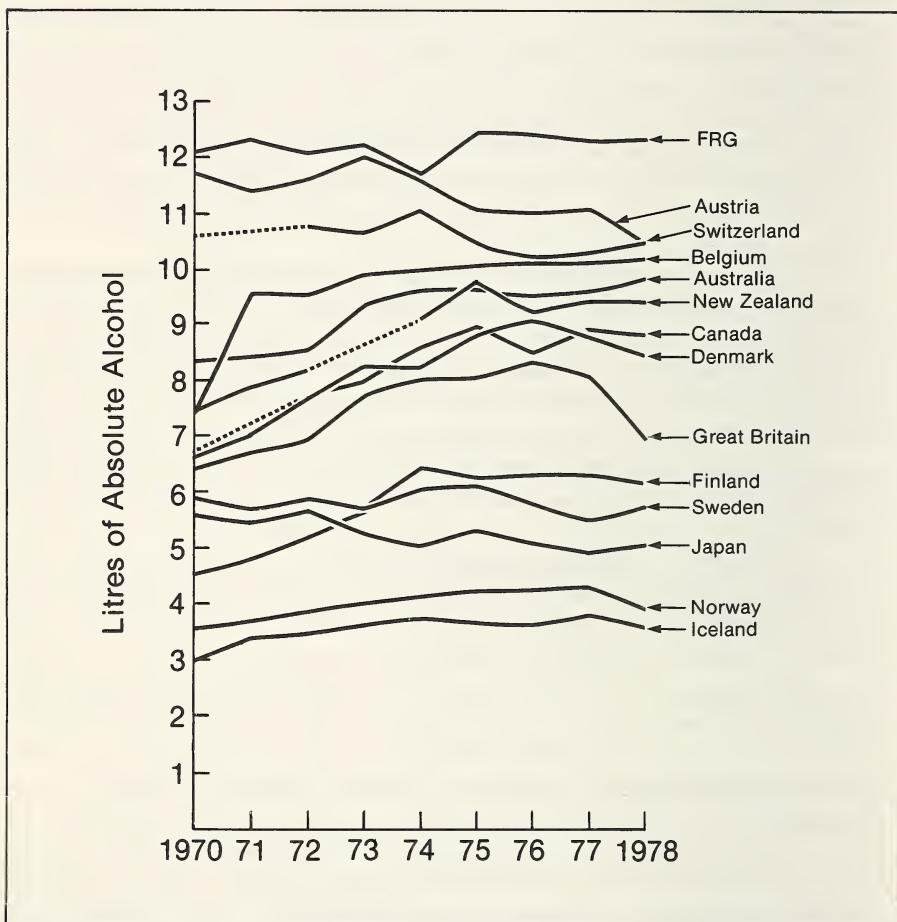
As seen in Figure 6.1, the increase in alcohol consumption slowed down or levelled off in many instances in the 1970s, and even some decreases are recorded. The economic difficulties experienced by most of the industrial world is obviously one explanation for this stabilization. Inasmuch as economic growth will remain permanently slower for the rest of this century, increases in alcohol consumption will continue to fall off. But just as increasing affluence was not enough in itself to explain the rapid rise in drinking, so other factors must be marshalled to account for the present tendency.

There are, indeed, grounds for supposing that the levelling off is not solely an interlude related to economic recession. The industrial world may be entering a new epoch, not only in terms of drinking but, more broadly, in terms of conditions of living and lifestyles. It is highly probable that great changes will still take place in occupational structure and technology, but these changes are not likely to affect peoples' lives as pervasively as the process of urbanization and the growth of the tertiary sector. Insofar as the increase in drinking may be interpreted as a historically conditioned and culturally mediated response to changes in social structure, we have little ground for extrapolating from post-war trends into the future. It is noteworthy that, at least in some countries, drinking among teenagers stabilized or decreased in the 1970s (Hibell and Jonsson, 1978; Irgens-Jensen and Rud, 1978; Ahlström, 1979; Rachal et al., 1980; Hibell, 1981). This finding should be interpreted with caution, however, as it may reflect other factors, such as a return to tighter legal and parental control (Vingilis and Smart, 1981) as much as a permanent shift in values among the young. There are also data indicating that youthful drinking is still increasing in some countries, for example in Poland (Ostrihanska and Wojcik, 1979). Nevertheless, the trends disclosed by youth surveys may imply

that the generations maturing into adulthood during the remaining decades of this century will not necessarily adopt the same level of drinking as their parents.

FIGURE 6.1

Total Consumption of Alcoholic Beverages in Litres of Absolute Alcohol Per Head of Population, Selected Countries, 1970-1978



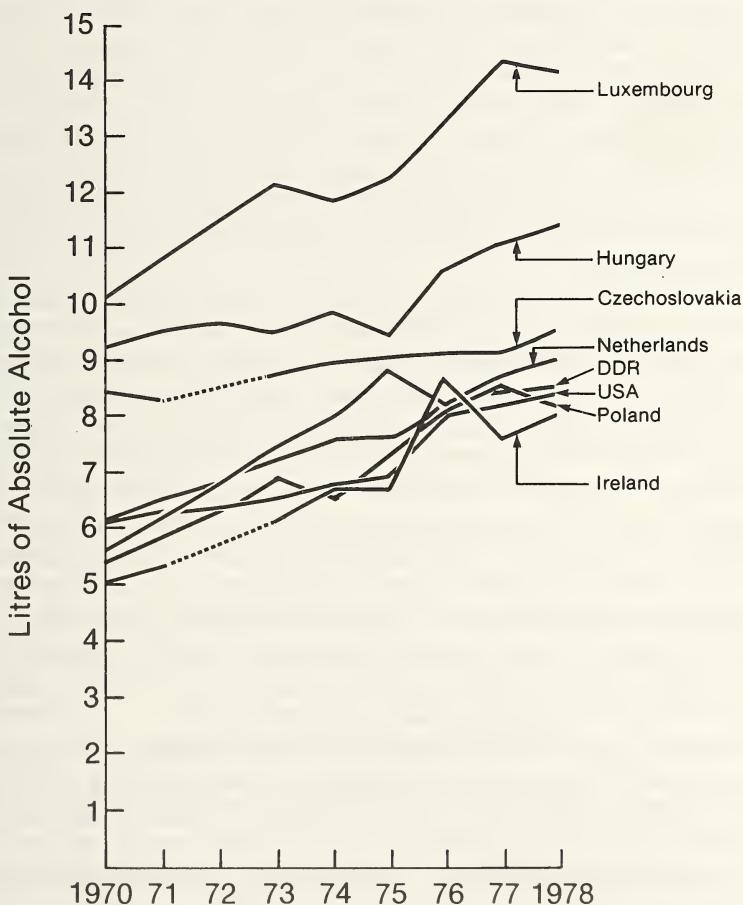
On the other hand, the consumption levels reached by the end of our study period should not be regarded as being in a state of spontaneous equilibrium. First of all, in a number of industrial countries, the long wave of increasing alcohol consumption shows no signs of a tapering off (Figure 6.2). Moreover, the process of automation may, by itself, have quite un-

predictable effects on conditions of living and lifestyles, not to speak of the impact of possible large-scale unemployment.

The levelling off of alcohol consumption was, in many countries, accompanied by a corresponding halt in the increase of problems related to

FIGURE 6.2

*Total Consumption of Alcoholic Beverages in
Litres of Absolute Alcohol Per Head of
Population, Selected Countries, 1970-1978*



single drinking occasions. Because of the longer incubation period involved, somatic and other consequences of prolonged heavy drinking are likely to continue to increase even if the consumption level were to stabilize. In any case, the overall level of drinking problems is likely to remain at a permanently higher level than before the growth in alcohol consumption.

The mixture of problems is unlikely to change to any significant extent. Event-type consequences will continue to be important, both from a public health perspective and from the perspective of the quality of social life. Given the surprising endurance of traditional patterns of drinking, cultural variation in the mixture of alcohol problems may be expected to remain significant.

There are, however, many signs of upcoming changes in the social response to drinking problems. First of all, the optimism about the treatment of "alcoholism" as a disease seems to be wearing off (WHO, 1980). The intellectual and scientific scepticism of intensive treatment programmes based on the classical disease concept of alcoholism has been accentuated by the fiscal crisis of the state. Because of the vast expansion in health expenditure over the last decades, it was relatively easy to provide services geared to alcohol-related conditions. In the future, increased financial strain will mean that alcohol-related public health expenditure will be scrutinized.

The tight financial situation of the social and health sector is only one of the manifestations of the crisis of the welfare state. Taxpayers' revolts, political disillusionment, support of local interests versus national ones, and the resurgence of spontaneous organization as opposed to the traditional mass organizations, which have increasingly become intermingled with the state apparatus, are all popular expressions of a faltering welfare state. On the state level, this is reflected in budget cuts, in the unwillingness to provide automatic governmental guarantee either to private enterprises or beneficiary client groups, and in the unresponsiveness to "the call for the government to step in whenever a group interest has been in jeopardy or could be extended" (Emile van Lennep, Secretary General of the Organization for Economic Cooperation and Development, 1980: 19). In representative analyses of the relationships between state and society, a renewed emphasis is laid on private action: ". . . new relationships between state and private action must be sought, new agents for welfare and well-being must be developed; the responsibilities of individuals for themselves and others must be reinforced" (van Lennep, 1980: 20). It is unlikely that such expressions are only passing frustrations at a time of scarce state resources. It is more likely that a phase in the history of the nation-state has come to an end. The tide goes "From the Welfare State to the Welfare Society," to quote the somewhat rosy title of van Lennep's article.

The tremendous increase in health expenditure has given the impetus to a revival of health moralism. The late John H. Knowles (1977: 59), a physician and a president of the Rockefeller Foundation, left no room for doubt: "I believe the idea of a 'right' to health should be replaced by the idea of an individual moral obligation to preserve one's own health — a public duty if you will." Such a definition of public health (i.e. as a matter of individual responsibility) will very likely be extended first to behaviours like smoking and drinking.

In many fields of social policy, there is an emergent change-over in the allocation of welfare resources, from marginal groups and the elderly (i.e. non-productive groups) to those who are more apt to contribute to the national economy. In alcohol-related services, too, humanitarian and rehabilitative services benefiting unemployed and homeless alcoholics have recently tended to contract, at least in relative terms. By contrast, more public resources are being invested in industrial alcoholism programmes as a strategy for reducing the costs of drinking to the production. Industrial alcohol programmes are very much in line with the overall trends in social control mentioned above: notwithstanding the medical vocabulary adopted by the programmes, they usually also imply a more continuous surveillance and control by the employers.

In view of the financial strains besetting the health and welfare sector, it is doubtful that the integrative and service-oriented approach to drinking problems will continue in the future. We have argued that one of the main reasons why preventive concerns were not given much weight in the transformation of alcohol control policies was that drinking problems were, in a way, absorbed by the expanding treatment system. If this assertion is correct, then we may also expect alcohol problems to become more of a social *and* moral issue in the future. The extent of social concern is not always a direct function of the true magnitude of the problem. The public seems to have been less worried about youthful drinking some 10 years ago than in recent years, despite the fact that, in a number of countries, teenage drinking has remained stable or diminished over the last decade.

When a social problem starts to become more pressing, young people are often selected as a special target group to be protected, even when the actual reasons for a problem emerging as a public issue lie elsewhere.

After lowering the drinking age from 21 to 18 in 1971, the Ontario government raised it to 19 years of age in 1979 in an attempt to control drinking problems among teenagers. However, despite this move there were government initiatives to effect further liberalization — most notably, a proposal to introduce the sale of wine and beer in grocery stores (Addiction Research Foundation, 1981). Thus, it would be misleading to interpret the raising of the drinking age to 19 as a major shift in Ontario's alcohol policy. Rather, it is one part of a dual response to alcohol issues.

While restrictions on teenage drinking are maintained or even reinforced, the availability of alcohol to older persons is increased.

The crisis in the treatment system as a mechanism for handling drinking problems seems to have brought about a revival of public concern about drinking. The growing interest about healthy lifestyles generally may also contribute to an increasing acceptance that alcohol is not simply a commodity to be enjoyed but something which entails social and health risks, in the same way as do other unhealthy items in the diet.

A possible revival of drinking as a moral issue may reinforce tendencies towards punitive and disciplinary control of individual deviant drinkers. At the same time, it is possible that preventive control policies may regain popular support. In mass moral sentiments, these two options are not necessarily alternatives to each other. Nevertheless, from a policy perspective, the distinction between individualized repressive control and preventive alcohol control policies may become increasingly salient.

In some of the study societies, a renewed acceptance of control measures has emerged over recent years, and there have been some minor moves towards a redifferentiation of alcohol as a commodity. In Switzerland, an amendment of the Alcohol Act stipulates that distilled beverages should be kept separate from other commodities even when they are sold in general stores (*Bulletin officiel de l'Assemblée fédérale*, 1980). In Finland, the first signs of a more restrictive alcohol control policy became visible in the latter part of the 1970s (Mäkelä et al., 1981). In Poland, alcohol control measures were given much prominence in the platform of the new independent labour unions, and the official policy is moving in a more restrictive direction (Moskalewicz, 1981). In most of these cases, the changes in legislation have been very minor, but they indicate a renewed willingness to reinforce the legal status of alcohol beverages as a special commodity.

To the extent that our vision of a slower growing or even declining alcohol consumption is correct, the industry is likely to experience serious problems of adjustment and over-capacity. Over our study period, there was a considerable surplus of wine, but the beer and spirits industries had little difficulty in marketing their products. The wine surplus is likely to grow in the future. Throughout the 1970s, there was a faster increase in production than in consumption of wine. In 1979, the annual surplus climbed to a record of 80 million hectolitres, corresponding to over a quarter of the world consumption of wine (Mauron, 1980). The investments made in the 1970s in the production of beer and spirits will not wear off until towards the end of the 1980s. Protection policies may call forth further investments even in face of a contracting world consumption of beer and spirits. The resistance to efforts to control consumption on public health grounds will be both strong and wide, involving, as it does, a great diversity of interests, including the producers, the retail networks, their

auxiliary industries, and the representatives of workers employed in any of these sectors. Moreover, international competition will intensify, as producers seek compensation for contracting domestic markets. It is particularly likely that producers in the industrialized parts of the world will intensify their investment and marketing efforts in developing countries in an attempt to win new customers.

The overall impression from our study is that, with the exception of wine, the growth in the production of alcoholic beverages occurred in response to expanding markets. Producers have been sensitive to, and exploited the additions of new drinkers and new drinking occasions which have accompanied the major societal changes during the study period. But as markets lead off or decline, the future situation may be different, and production interests may exert more pressure to counteract widening popular support of restrictive alcohol control policies.

Policy-makers may attempt to harmonize these potentially conflicting interests by channelling popular sentiments into policies emphasizing individual rather than state responsibilities. This can take several forms. Limitation of availability or structural strategies for reducing alcohol problems may be deemphasized or ignored in favour of solutions which rely on changing individual drinking behaviour; some governments may withdraw drinking problems from state-sponsored social insurance programmes; the responsibility of the family may be reinforced by increasing the economic and social dependence of its members; the control and surveillance aspect of treatment programmes may be enhanced; and openly punitive sanctions against heavily drinking individuals may be reintroduced. As will be discussed in the next chapter, in our view, the policy alternatives should not be limited to this range of solutions.

7. Conclusions

The background for this study was the conclusion reached by the 1975 project group on alcohol control policies which stated that: "Changes in the overall consumption of alcoholic beverages have a bearing on the health of the people in any society" (Bruun et al., 1975: 90). In our own study, we found nothing that would require a revision of this basic position. Between different cultures, we found considerable differences in the level of problems of any given kind that are attached to a certain level of consumption. Even in a given cultural setting, the relationship between consumption and problems is by no means a simple one. One of the basic findings of our study, however, is that the growth in alcohol consumption was accompanied by an increase in a broad variety of problems related to drinking. When all the case studies are taken together, this holds true not only for consequences of prolonged drinking, but for social and health problems related to single-drinking episodes.

There were important changes in the profiles of alcohol problems in our study societies. The diffusion of drinking into practically all segments of the population and a growing number of social situations has made it more difficult to localize the alcohol problem in a particular population group or a particular lifestyle. More than ever, problems stem not only from pathological or deviant drinking, but from an outgrowth of socially-integrated patterns of consumption.

Despite the convergence in styles of drinking, typical problematic behaviours associated with drinking in each culture seemed to be very persistent and surprisingly immune to transformations in social structure. From a policy perspective, the core patterns of drinking prevailing in each society have to be taken, to a large extent, as culturally given. In particular, it is not likely that social disruption and event-based problems such as accidents and drunk driving will be replaced by somatic diseases as the predominant manifestations of drinking problems.

In an era of general prosperity, the increase in alcohol problems could be absorbed by an expanding system of medically oriented treatment services. Furthermore, the promotion of the disease concept directed attention to deviant drinking and away from the beverage as the locus of alcohol problems. Government intervention in the alcohol market has by no means disappeared and has, in some respects, even been intensified, but this has happened for reasons quite unrelated to the social and health aspects of drinking. The outcome has been the reinforcement of vested interests in alcohol, which may exert a constraining influence on the

possibilities of preventing alcohol problems in the future. It is not only the mere magnitude of the economic interests involved that is significant. From a policy perspective, it may even be more important that, by now, alcoholic beverages have at least a marginal bearing on the livelihood of much more diversified population groups than before.

We want to stress that our concern about the possible harmful consequences of drinking has by no means caused us to forget the pleasure that it gives to the great majority of consumers. Neither do we question the legitimacy of the interests of those who gain their livelihood from the drink trade. We should also keep in mind that to causally attribute social or health problems to someone's drinking is to point up individual failings against possible structural or situational explanations of these problems. Attributing too many problems to alcohol may thus be as misleading as attributing too few. Solving the problems of alcohol consumption would not solve the most important problems of a society. Furthermore, preventive alcohol control is not the only approach that a society can take in dealing with its alcohol problems. In particular, providing treatment to those suffering from drinking problems should be an integral part of any overall policy on alcohol. Finally, it is customary to point to the dangers inherent in not taking into account the concrete preconditions prevailing in each society. After having conducted our study, we want to be very emphatic about this point. Moreover, our study has shown that changes in alcohol legislation and in the availability of alcoholic beverages occurred as an integral aspect of an overall process of historical change.

The fact that policy changes can be understood or even explained in terms of social history does not imply that these same policies cannot be affected by conscious action. The fact that price trends for alcoholic beverages have been determined by processes quite unrelated to preventive concerns, for example, does not preclude the possibility that in any given situation pricing can be used to affect the level of consumption. Our social historical approach should thus not foster apathy or cynicism in regard to the potentials of preventive control policies. Specifically on the basis of our analysis, we offer these conclusions for the consideration of policy-makers:

1. In our study, we found a duality in the state's action on alcohol. On the one hand, preventive considerations have carried little weight in the formation of economic policies affecting alcoholic beverages. On the other, the social and health agencies responsible for the handling of alcohol problems have had little interest in the economy of alcohol. There is urgent need to combine these two agendas in alcohol policy decisions. In some cases, a reorganization of responsibilities among branches of government may be required to achieve a successful combination of economic, social, and health considerations.

2. There is a growing conflict between increased concern about alcohol problems and the economic interests of the alcohol trade that is exacerbated by static or declining markets. In a situation of increased acceptance of drinking in everyday life, policies may tend even more toward individual control of deviant drinkers. In an era of contracting public welfare resources, this tendency may be expressed more in punitive than in treatment-oriented measures. The singling out of individuals for special handling, whether in the form of treatment or punishment, often carries with it adverse side effects, for example their permanent identification as deviants. In our view, preventive alcohol policies should, therefore, be given a high priority as an alternative to the morally inspired control of problem drinkers.

3. While the overall increase in alcohol consumption could not be attributed to the general relaxation of control regulations in the study societies, the policy approach taken by most governments reinforced the increasing acceptance of alcohol into people's everyday life, and made way for expanding the supply. Conversely, a policy of avoiding further relaxations in alcohol control could reinforce the more restrictive popular sentiments about drinking that are visible in many countries today. Apart from the direct impact which such a policy can have on drinking patterns or problems, it will provide support for what may already be a trend towards lower levels of consumption. Considering that alcohol issues involve very complex cultural, social, and political phenomena, policy changes on alcohol should be made with caution and with a sense of experiment. Sudden and drastic interventions by the state in drinking practices have often had untoward and unintended effects.

4. It appears that event-based drinking problems such as traffic casualties and alcohol-related violence will continue to play an important role in developed industrial societies in the near future. While control of availability should be given a high priority, it is important to consider the use of governmental powers to manipulate the environment of drinking so as to lower the risk of adverse consequences.

5. The simultaneous consideration of economic and social issues is particularly urgent given the emerging situation of contracting markets for alcoholic beverages. In particular, governments should carefully reconsider any fiscal and other incentives promoting investments in the production and distribution of alcoholic beverages. The use of alcohol as a fuel, on the one hand, increasingly offers an alternative outlet for excess distilling capacity, but on the other, brings inevitable problems of diversion to beverage use. The prospect of increased excess capacity in the alcohol industry also brings with it the likelihood of intensified international competition and of economic pressures being exerted on alcohol producers to conquer new markets in developing countries.

6. In the context of international trade agreements, alcohol is often treated like any other commodity. The export of alcohol or of production capacity for alcohol brings economic benefit to the exporting country, with none of the costs associated with domestic consumption. To bring to bear consideration, at an international level, of the health and social costs associated with alcohol trade may require mechanisms for the expression of international control interests, perhaps similar to those which already exist for the opiates and for harmful additives to food. As an interim step, WHO and other international organizations should give close attention to existing and future trade policies and arrangements with a potential for affecting the availability of alcoholic beverages.

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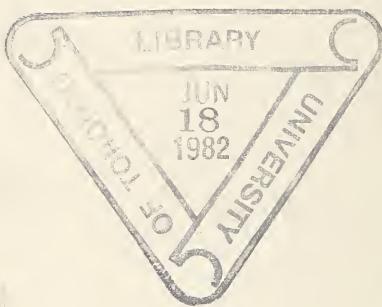
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